



SUPPLIER MANUAL

2019

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1. Introduction

1.1. About this manual

The purpose of this manual is to describe and define the concepts, documents and routines that Dynapac's suppliers must be able to handle to fulfil their undertakings. The contents in this manual are mainly intended for suppliers to Dynapac in Karlskrona, but where appropriate are also applicable for Dynapac's other production locations. Dynapac is a world leader in its business area. To maintain this position it is essential that we continuously implement improvements for our processes and methods of working. The market sets increasingly stringent requirements for shorter lead times, reliable deliveries and cost-efficiency, and our expectations of you are equally high.

Dynapac's suppliers undertake to follow and accept the substance of this manual's contents, provided it does not conflict with other written agreements. We look forward to a successful partnership with you, and we expect your full commitment!

Dynapac Compaction Equipment AB

1.2. About Dynapac

The Vibro Factory was established in 1934 in Stockholm. The business concept was based on an invention for the compaction of concrete by means of the use of vibrating rods. This concept was further developed and in the early 50s also included the design and manufacturing of a vibratory roller for compaction of soil. "The Roller", which was manufactured at the Vibro Factory in Ljungby, was very successful and production volumes rapidly increased. Another factory was established in Karlskrona in 1960 to focus on the manufacturing of rollers, while Ljungby concentrated on manufacturing of light equipment and handling of spare parts. Since the beginning of the 90s the group has focused its strategic functions such as purchasing, marketing, research and development, service and after-market, in Karlskrona. Today Dynapac employs about 1 300 persons all over the world. Dynapac is certified in accordance with ISO 9001, ISO 14001, OHSAS 18001:2007 and was one the first OEM player in the world to receive an environmental certificate. Dynapac is an international manufacturer of compaction and asphalt equipment, with production plants in Sweden, Brazil, China, Germany and India. We have become a world leader thanks to our ambition to achieve high quality and performance in relation to overall economy. The components included in Dynapac's products come from over 200 suppliers primarily in Sweden and Europe. More than 95 percent of the products manufactured in Sweden are exported.

Machines and spare parts are distributed all over the world.

Dynapac was acquired by Fayat Group 2017.

1.3. Dynapac in Karlskrona, Sweden

Visiting and delivery adress:

Industrivägen 2

371 46 Karlskrona

Post adress:

Box 504

371 23 Karlskrona

Tel: +46 (0)455-30 60 00

Coordinates: N 56° 12' 3", E 15° 37' 33"

Decimals: 15.625726, 56.200917



Figure 1 Dynapac in Karlskrona

Production: Production of vibratory and static rollers Production of drums

Total area: 120,000 m² Factory area: 27,000 m²

1.4. The Fayat Group

As a major construction and industrial company, the French group FAYAT has been working in 7 main professions for 60 years: Public works, Foundations, Building, Energy services, Steel and lifting equipment, Pressure vessels and Road building equipment.

Working across 152 independent subsidiaries set up in 120 countries, its 19,000 employees play a daily part in continuing its growth. Fayat makes a turnover of nearly 3,5 billion euros.

Founded by Clément Fayat in 1957, Fayat has become the 4th construction and civil engineering trades group and the first family group in construction and industry in France. Its design and mechanical manufacture activities make it the only full-liner in road building equipment in the world.

Aware of its social and environmental responsibility, Fayat helps to fit out our living environments alongside other companies and local authorities on a daily basis. Fayat assists its public and private customers alike in carrying out both small- and large-scale equipment and development projects.

In an environment where innovation is picking up pace and where the demands for profitability are rising, Fayat has successfully developed and diversified its business from the outset – whilst staying true to its original profession: civil engineering.

2. The basics for business

2.1. Basic requirements for Dynapac's suppliers

We seek business partners whose policies regarding ethical, social, and environmental issues are consistent with our own, and we make them aware of our commitments and expectations. Business partners are selected and evaluated impartially on the basis of objective factors including quality, delivery, price, and reliability, as well as commitment to environmental and social performance, and development. Suppliers that deliver, or are going to deliver, material for Dynapac's production must have undergone a qualification process that includes the following steps:

- Evaluation and approval as per Dynapac's supplier assessment, where the supplier's financial, technical, quality and environmental, as well as organizational capacities are evaluated.
- ISO9000/QS9000/TS16949 or equivalent certificate and ISO14000 or equivalent certificate.
- Accepted and implemented instructions in Dynapac's Supplier Manual.
- Secured process for order handling and invoicing via EDI.
- Signed business agreement according to Dynapac's general agreement or the equivalent.

2.2. Supplier Portal

The Supplier Portal is a tool for sharing documents with our suppliers, see the below link below.

<https://www.dynapac.com/supplier>

This portal should not be mixed up with our web order system PipeChain. In the Supplier portal you will find information such as your delivery performance, business code of practice, drawings and standards, quality reports and other general information.

In the supplier portal you will also receive work flows such as packing code changes or engineering change notes. These workflows are sent to the dedicated person or persons for review and confirmation.

The supplier has the possibility to change the responsible receiver of a work flow in the so called "Supplier Profile". Note that if you want to add a person who has no username, you need to contact a responsible person at Dynapac to initiate a new account.

For more information about the Supplier Portal please follow above link and read the introduction.

Your purchasing contact will provide you with a username and password to the portal.

2.2.1. Contact Persons at our Suppliers

In order to maintain a good communication it is important that we have a dedicated contact person for commercial questions but also for orders and quality. If these contacts change, please contact Dynapac so we can update our system and if necessary educate the new contact person in our processes.

2.3. Quotations to Dynapac

A quotation issued to Dynapac must contain all the relevant information required for a commercial decision. In addition to basic information on price, price influencing production batches and packaging quantity, where this is of importance for the supplier's production or handling arrangements, the following information must also be included:

- Lead time for initial samples, prototypes and serial production. Dynapac's part numbers and denomination.
- Valid drawings.
- Supplier denomination.
- Information on currency effects.
- Information on raw material price effects.
- Tool costs, where appropriate.
- Country of Origin
- HS Code
- Packaging costs
- All additional information that can affect the price in the future.

2.4. Initial sampling

The purpose of initial sampling is that the buyer and the supplier can jointly verify that specified requirements are accepted, understood and correctly implemented. The initial samples must be manufactured under serial production conditions in the equipment and at the place where the serial manufacturing is intended to take place.

The supplier shall deliver an initial sample on parts manufactured exclusively for Dynapac, or up on request. When a part is completely new all the dimensions and properties on Dynapac's drawing must be verified. By changes on existing part numbers, only the changes themselves need to be verified.

The delivery of the initial sample or prototype shall always be labelled with Dynapac's special yellow pallet flag.

Dynapac must give its approval when the supplier is planning to change materials, dimensions or other characteristics, relocate all or parts of the production equipment, to change supplier, etc. These and other similar situations shall be preceded by a new initial sample.

- The initial sample documents shall be e-mailed to Dynapac by the time of the delivery. No paper copy is required.
- The 10 digit part number is to be written in the 'subject' or heading of the email.
- The supplier is required to store the original measurement protocol on its own premises, and make it available upon request.
- Documents for “Initial sample” and “Sample Record” is available at our supplier portal.

Part No / Blank No. / Artikel nr / Amne nr	Rev.	Designation / Benämning	Type / Protyp <input type="radio"/> Initial sample Utfallsprov <input type="radio"/> Experimental Prototyp
Supplier / Leverantör		Measured according to ECN / Mått enligt ECN	
		Drawing No. / Ritningsnr	Rev.
		Purchase order No. / Inköpsorder nr	
Documentation from laboratory test is enclosed / Protokoll från laboratorieprovning medföljer <input type="radio"/> Yes / Ja <input type="radio"/> No / Nej			

Figure 2 Initial sample report. You can find the full document on our supplier portal: Dynapac.com/supplier

Production Location	E-mail
Karlskrona	sqa@dynapac.com

Table 1 Email address for initial sample documents

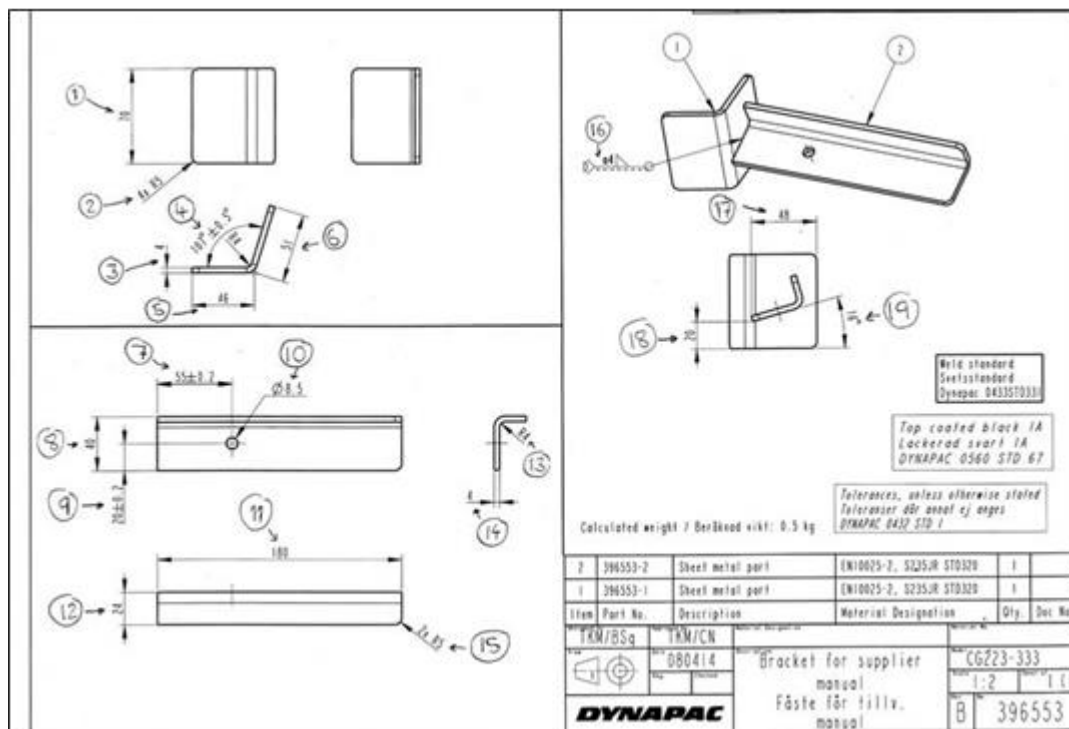


Figure 3 Drawing with dimensions markings


		MÄTPROTOKOLL Resultat från dimensionskontroll SAMPLE RECORD Results from dimensional inspection													
Leverantör / Supplier 0															
Part No. / Artikel nr 0		Rev. 0		Drawing No. / Ritning nr 0			Rev. 0		ECN No. 0			*G - Accepted / Godkänd EG - Not accepted / Ej godkänd			
Pos. in drawing	Characteristic / Egenskap	Supplier's Inspection result / Leverantörens kontrollresultat	1	2	3	4	5	1	Inspection result / Kontrollresultat	2	3	4	5	Notes / Anteckningar	G. EG*

Figure 4 Sample record. You can find the full document on our supplier portal: [Dynapac.com/supplier](https://dynapac.com/supplier)

2.5. Ordering of material for prototype production

Material for the production of prototypes is ordered in the design phase. Note that this material must be handled in the same way as an initial sample. A measurement report and valid drawings must be sent to sqa.dynapac@dynapac.com and the delivery must be accompanied with an additional yellow goods flag (see figure 15).

Prototype drawings has the revision letter [K0, K1, K2 etc.] and must not be used for serial production. There are no requirements that prototypes must be manufactured under serial production conditions.

2.6. Drawings and other specifications

Different methods are used to describe a product, depending on the complexity and nature of a purchased product. The most common procedure is that we refer to a drawing, which if a change has been made is provided with a revision letter.

BoM (Bill of Materials) describes a part by referring to several part numbers and documents.

Dynapac standard is for the purpose of documenting general requirements on quality and tolerances (STD1), painted surfaces (STD67, STD61) and surface roughness (STD2). Also standard parts as hose clamps, o-rings and screws are described in the different standards. These can be found in the Supplier Portal.

2.7. Dynapac's tools in the suppliers production

Tools purchased by Dynapac for the supplier's production are the property of Dynapac and must be marked with an identification tag provided by Dynapac. These tools must be maintained and insured by the supplier for as long as they are used. This applies both for serial production and the supply of spare parts. If the supplier wishes to scrap, or change a tool, this may only be done after a written approval from Dynapac.

2.8. Supply of spare parts

Dynapac's spare parts policy means that spare parts are guaranteed to be available for at least 10 years after one of Dynapac's products is no longer manufactured. However, the aim is to have spare parts

available on the market for 15 years. If requested it must be possible to deliver directly to our sales companies, distribution centers or end customers. The supplier accepts Dynapac's right to sell the supplier's parts as spare parts to Dynapac's customers. In the event of a breakdown of machinery or other stoppages on a product in serial production, Dynapac guarantees delivery of spare parts within 24 hours. This undertaking is naturally based on our suppliers supporting this policy.

The purchase prices valid for Dynapac's serial production shall be valid for Dynapac's supply of spare parts. The agreed purchase price on a part that is excluded from Dynapac's production shall remain valid until otherwise agreed.

A supplier must on request be able to provide Dynapac with complete specifications to enable production of spare part and service documents before Dynapac's serial production starts. This may refer to exploded views and lists of spare parts with supplier designations and part numbers. The classification of wear parts (e.g. "fast moving parts") may also be requested. It shall be indicated which parts are not sold separately. Prices, lead times, contact persons, HS- codes and country of origin shall be specified for all separate parts. Contact persons for price inquiries, delivery confirmations and technical support shall also be specified in the documentation.

3. Order to Delivery

3.1 Order handling

Dynapac communicates forecasts and orders via EDI and the web portal PipeChain. By integrating the flow of information between us and the supplier, from the receiving of orders and forecasts to confirming, advising and invoicing deliveries, we can secure the efficiency and quality in the entire process from ordering to invoicing.

In the web portal PipeChain you as a supplier can;

- Monitor and collect delivery schedules and purchase orders
- Create and send purchase order confirmation
- Create and send dispatch advices
- Create and send invoices

For information regarding PipeChain contact the purchasing department or see the manual for PipeChain. The manual can be found in the Supplier Portal.

If you are in need of support in the WEB-EDI system, please contact the PIPECHAIN support:

Email: support@pipechain.com Phone: +46 31 727 8610

Log in via the web page: www.hosting.pipechain.com/dynapac/login

3.2. The delivery schedule

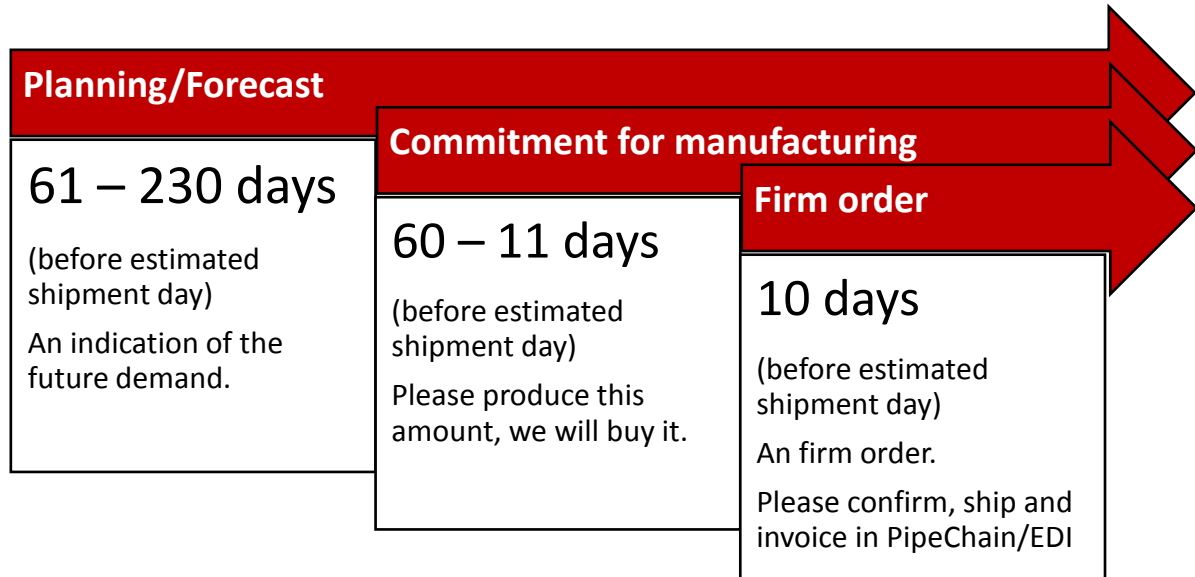


Figure 5 The Delivery schedule (an example)

It is important to understand the delivery schedule concept. It both defines the actual orders but also Dynapac's committed purchasing volumes, and it is also the tool for the suppliers long term planning. The delivery schedule is updated weekly but demands within the Firm order period will be released daily.

- Firm order defines the time from actual order to expected dispatch.
- Commitment for Manufacturing defines Dynapac's commitment of purchase.
- Planning/Forecast

Dynapac is entitled to request changes within the firm order period if specific needs arise. If the supplier can meet this without unreasonable consequences, the delivery should take place in accordance with Dynapac's request. If no agreement is reached the delivery should not be considered to be delayed if Dynapac's new required date or volumes cannot be met.

Dynapac's commitment in "Commitment for Manufacturing" must be regulated within one year after the last order is made for the applicable part. It is the supplier's responsibility to assert a claim in relation to this commitment.

3.3. Dynapac's Kanban process

The lean concept at Dynapac states consumption based material replenishment system such as Kanban. The ordering of material is initiated alongside the different production lines as an effect of the real consumption, not according to an MRP system. Since the total lead time is crucial for the total amount of material in the Kanban loop, it is equally important to shorten the lead time from order to delivery. The supplier shall plan its deliveries to Dynapac and keep a relevant amount of stock, to ensure the short lead time.

Dynapac provides a preliminary, weekly updated, delivery schedule. The Supplier must be aware of the fact that the delivery schedule is preliminary and that the deliveries shall take place according to the Kanban order that are sent in the normal order process. A Kanban order has its order number and does not in any way differ from any other orders sent by Dynapac, and shall accordingly be handled in the same way. Further on, Dynapac strive towards an even production tact. The market demand and various customer specific features can however affect this.

When entering the Kanban process the parties must agree on certain parameters:

Lead time: Lead time of 1 day assume that the Supplier shall have received the order at latest a.m. 08.00 on day 0, to ensure to book transport and manage pick up on day 1.

Batch size: Dynapac shall order the agreed batch quantity and the Supplier must ensure to deliver these quantities. Partial deliveries are not allowed.

Packaging: Since the purchased parts have their designated storage location alongside Dynapac's different production lines, the agreed packaging must be used, to avoid repacking and storage problems. Also note that a Kanban order must be sent in a separate package.

Pick up days: The Kanban orders shall take the defined pick up days in consideration.

Dynapac's commitment of purchase volumes is defined by the "commitment for manufacturing" shown on the delivery schedule. This concept shall not conflict in any other agreements, commitments or processes between the parties.

Also note the “blind spot” of the delivery schedule on Kanban parts. The delivery schedule is not “allowed” to enter order numbers within the firm period. The Kanban process however creates orders regardless of the delivery schedule and places them on the right pick up day, within the firm period.

Even if the concept of firm period is not applicable in the Kanban process, the technical set up in the MRP- and EDI-system still demands this parameter. One or several batches of forecasts, immediately after the firm period, indicate that Kanban orders will be sent within the system’s firm period. To avoid any confusion, it is preferably to use short firm period.

Blind spot of the Kanban Schedule

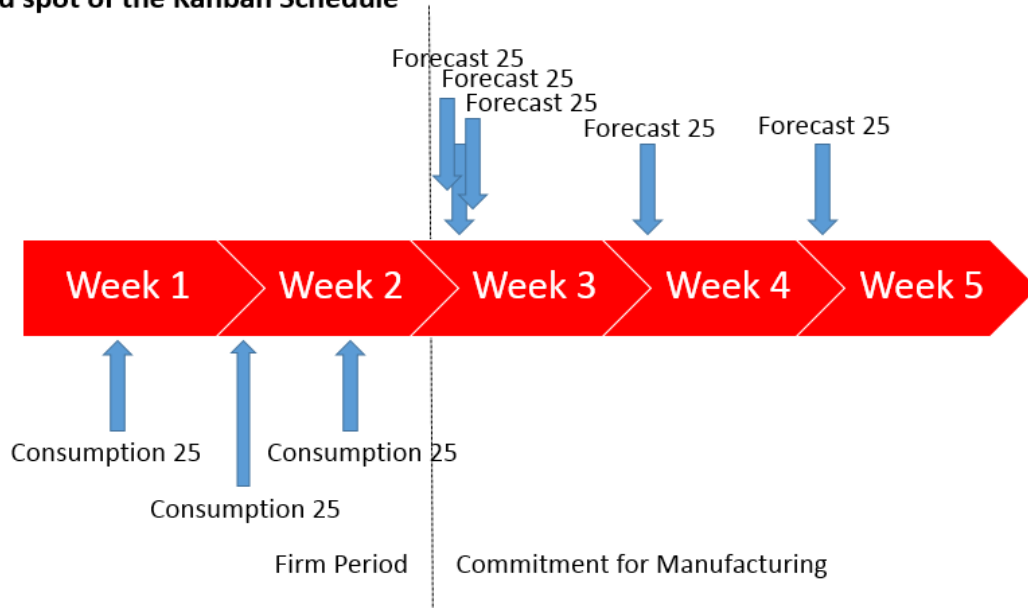


Figure 6 Delivery schedule for Kanban parts

3.4. Invoices

If you handle our orders in PipeChain or via EDI we also want you to handle our invoices that way, in other cases you can send a PDF invoice to our economy department via email:

accountspayable.sft@dynapac.com

We try to minimize the amount of paper invoices and emails to several addresses.

4. Transport

4.1. Transport Booking

Dynapac will provide the supplier with a transport booking instruction and our customer number at the forwarder, this instruction should be followed when booking a shipment to Dynapac. The supplier is further responsible for booking the freight with the specified freight company so that the collecting of the goods can take place on the confirmed day. Booking of transports have to be made on time and in accordance with the freight company's regulations. If the goods are not collected on time as a result of reasons related to the freight company, the supplier must inform Dynapac of this in writing to claim that the goods were delivered on time. To avoid line stop in our production an express delivery with another forwarder may be relevant in these cases.

Dynapac's purchasing department buys most goods on FCA (Free Carrier, Incoterms 2010). This means that the supplier have the responsibility for the goods until it have been loaded on the truck at the named place of delivery, once the goods are loaded the risk and responsibility have transferred to Dynapac. The supplier must make sure that the goods are correctly loaded on to the truck with a packaging protecting the goods from transport damages.

The supplier is also required to do the export clearance if the goods are to pass the border of EU.

4.1.1. On Time Deliveries

If the supplier finds that he will not be able to deliver on time or if delays arise on the supplier's side, the Supplier shall immediately notify Dynapac in writing regarding such delay, stating the reason for the delay and the time that delivery is estimated to take place. Such notification does not imply, however, that the supplier has complied with his commitment to deliver on time.

Delivery must be made in the correct quantity, i.e. in accordance with Dynapac's order. If a situation should arise whereby the supplier cannot fulfill this, the supplier shall ask Dynapac for approval. Partial deliveries to our kit warehouse or within Dynapac's Kanban process cannot be accepted.

A delivery shall not be considered as delayed, if Dynapac has not respected the agreed lead time (on orders without a delivery schedule) or firm order period.

Please see chapter 7.2 for information about how we measure the delivery performance according to confirmed delivery dates.

4.2. Goods labelling and delivery notes

The correct delivery note is automatically generated via dispatch in the web-portal PipeChain. The delivery note must be delivered together with the goods. Note that the Dynapac reference number or purchase order number and delivery note number (delivery number) must be specified along with the Dynapac part number and quantity.

Material to Dynapac must be labelled with barcode flags in accordance with the Odette standard, see figure 27. Goods flags are generated automatically on completion of advising in the WEB-EDI system.

If the supplier creates pallet flags other than via our WEB-EDI system, the pallet flag must still be arranged according to the example below. The barcode is obligatory and can easily be created via the Word font FREE 3 OF 9 Extended.

It is very important that any staples used to fasten the goods flag do not damage the barcode, and that the barcode is not distorted by text or stretched edges. It must be completely visible.

Destination: delivery area

Supplier Dynapac Compaction Equipment AB Karlskrona		Destination Centralförrådet	
Advice note (identifier N) → 447869 		Supplier MULTI-WING INTERNATIONAL A.S	
Dynapac partnumber (identifier P) → 4700390607 		Quantity (identifier Q) → 16 	
Supplier number (identifier V) → 101174 		FAN Rev: Packaging code - B, 2016-03-07 1147061 	
116470 		Dynapac purchase order number(identifier K) →	

Figure 7 Goods flag (Odette label)

- Deliveries with pallet and collars shall be labelled on the short side of the lowest collar
- If the delivery contains more than one package, this must be clearly visible
- A goods flag shall only contain 1 part number, 1 order (reference) number attributed to 1 package
- The delivery note shall be attached to the pallet in a plastic envelope beside the Odette label (Fig 8)
- The Odette labels need to be visible from the left side of the truck (unloading side)
- Pallets and carriers must be loaded on to the truck to enable unloading from the side of the truck (Figure 7 A and B)



Figure 8 A and B The fork tunnels in the right direction to enable unloading





Figure 9 Delivery Note attached to the pallet in a plastic envelope beside the Odette label

4.3. Packaging and packing instructions

Packing material like pallets, lids and collars and also Dynapac's blue boxes shall be ordered from Dynapac's packaging pool. Pallets, lids and collars will be invoiced according to a separate price appendix. Observe that other packaging and handling costs shall be considered to be included in the purchasing price if not specifically agreed on.

The sales and purchase of pallets, lids and collars shall be plus minus zero at the end of the year. It is the supplier's responsibility to make sure that the sales of packaging material equals the amount of packaging sold. Any relevant surplus of packaging material sold to Dynapac, will be invoiced back to the supplier at the end of the year. The supplier can at any time obtain the balance status from Dynapac.

Consider a lead time of 5 days between ordering and shipment packaging material. Also keep the stipulated minimum lot size when ordering packaging material (see the price list in the supplier portal) to keep down the transportation cost.

Production Location	E-mail
Karlskrona	emballage.karlskrona@dynapac.com

Table 2 Contact information to Dynapac's packaging pool

The supplier is obliged to handle and pack material to prevent damages, rust, scratches and dirt. The deliveries must be packed according to packing instruction or packaging code, or otherwise according to the standard packaging listed below in table 3. The packaging code is visible on the purchase order and in the supplier portal.

To protect from rust, the supplier shall use VCI paper in a closed plastic bag. It shall be possible to open and close the bag without damaging it. The opening shall be placed to prevent water from getting in, and the bag itself must be packed in a way that prevents it from damages.


If the usage of VCI protection is specially requested by Dynapac, the packing code is complemented with the letter "V", e.g. "AV", meaning: EU-pallet + 1 frame + VCI.

Packing Code	Description	Maximum Weight
P	EU-pallet without frame	1000 kg
A	EU-pallet with 1 frame	1000 kg
B	EU-pallet with 2 frames	1000 kg
C	EU-pallet with 3 frames	1000 kg
D	EU-pallet with 4 frames	1000 kg
E	EU-pallet with 5 frames	1000 kg
S	EU-pallet with 6 frames	1000 kg
F	Special Carrier	-
G	Carton 250x150x150 mm	15 kg
H	Carton 390x190x190mm	15 kg
I	Carton 600x300x240mm	15 kg
M	Dynapac Big box 600x400x250	15 kg
N	Dynapac Medium box 400x300x250	15 kg
R	Dynapac Small box 300x200x150	15 kg
O	Supplier's package	15 kg
Q	Specific instruction	-

Table 3 Standard packaging to Dynapac

4.3.1. Some more guidelines to packing

- Tape may not be applied on painted surfaces
- Parts delivered on pallets must not exceed the edge of the pallet.
- Goods must be protected and secured with collars, wooden lids, plastic film and plastic bands (PET-type), but NOT steelbands.
- Inserts must be placed on the bottom of the pallet to protect the material and prevent small parts falling out.
- Pallets with collars, containing small parts, must be banded to prevent the collars separating. Only one part number or kit number must be used per carrier, unless otherwise stipulated.
- All carriers must be labelled with goods flags on the short side. If several boxes are packed on one pallet, the goods flag must face outwards so that the goods can be identified without breaking the pallet.
- Goods that risk being exposed to corrosion during transport and storage shall be protected with VCI paper
- Dynapac's plastic boxes and other special carriers may only be used for direct/indirect deliveries to Dynapac.
- Defective carriers may not be used, and must be immediately returned to Dynapac for repair. These carriers must be marked so that it is clear that they are damaged. Defective pallets must not be used (see figure 18).
- An inventory must be made of Dynapac's carriers at the request of Dynapac. If carriers have been used for other purposes than deliveries to Dynapac, or have been misplaced, the costs will be debited to the supplier.
- Some companies have the policy to receive empty boxes to enable full layers to be able to stack several pallets. But to Dynapac, empty boxes shall never be used.
- All blue boxes and small packaging must be placed together on a dedicated pallet, see figure 12.

 FÖRPACKNINGSINSTRUKTION PACKING INSTRUCTION			
Utfärdare/Issued by Alexander Ek		Godkänd/Approved by Alexander Ek	
Ort/Place Karlskrona		Reg.nr/Reg No. 4812250437	
Datum/Date 2018-12-11		Utgåva/Issue 1	
Sida/Page 1(1)			
Dynapac Artikelnr/Part No. 4812250437			
Benämning/Description Hydraulic hose kit			
Lastbärare/Goods carrier Pallet 1200x800 mm with three frames + cover			
Antal i lastbärare/Quantity in unit According to agreed unit load			
Bruttovikt (kg)/Grossweight (kg)			
Packinstruktion/Packing instruction			
<p>Divide the hose kit into five parts according to the breakdown below. Label each part with their numbers. Pack up the five various parts and label the entire hose kit with its number.</p>			
1.) 4812121715 4700483893 4812121715		3.) 4812121770 4812121712 4812121714	
2.) 4812130193 4700483781 4812130196 4700483954		4.) 4812130193 4812121779 4812130193 4812121771	
		5.) 4812121219 4812121709 4812121708 4812123096 4812123096 4812122581 4812130191 4812130191 4812121769 4812121778 4812121228 4812123537	
Övrig information/Other information Förpackningsinstruktionen gäller fr.o.m nästa leverans. Återkom inom 2 veckor vid ev. kommentarer / The packing instruction must be followed on all future deliveries. Please reply within 2 weeks if you have any comments.			
Vad gäller beställning lastbärare, märkning, bandning, etc se Dynapacs Leverantörsmanual. Regarding order goods carrier, marking, strapping etc, see Dynapacs Supplier's Manual.			

Dynapac Compaction Equipment AB
 Box 304, SE-371 23, Karlskrona, Sweden, Tel. +46 455 30 60 00, Fax: +46 455 30 60 30, www.dynapac.com

Figure 10 Packing instruction



Figure 11 Blue boxes: small, medium and big box



Figure 12 Blue boxes correctly loaded and strapped



Figure 13 Blue boxes, NOT correctly loaded



Figure 14 Pallets correctly stacked with lids in between



Figure 15 Stacked pallets but without lids in between



Figure 16 Open pallet covered with a lid



Figure 17 Stacked pallet but only plastic fill in between

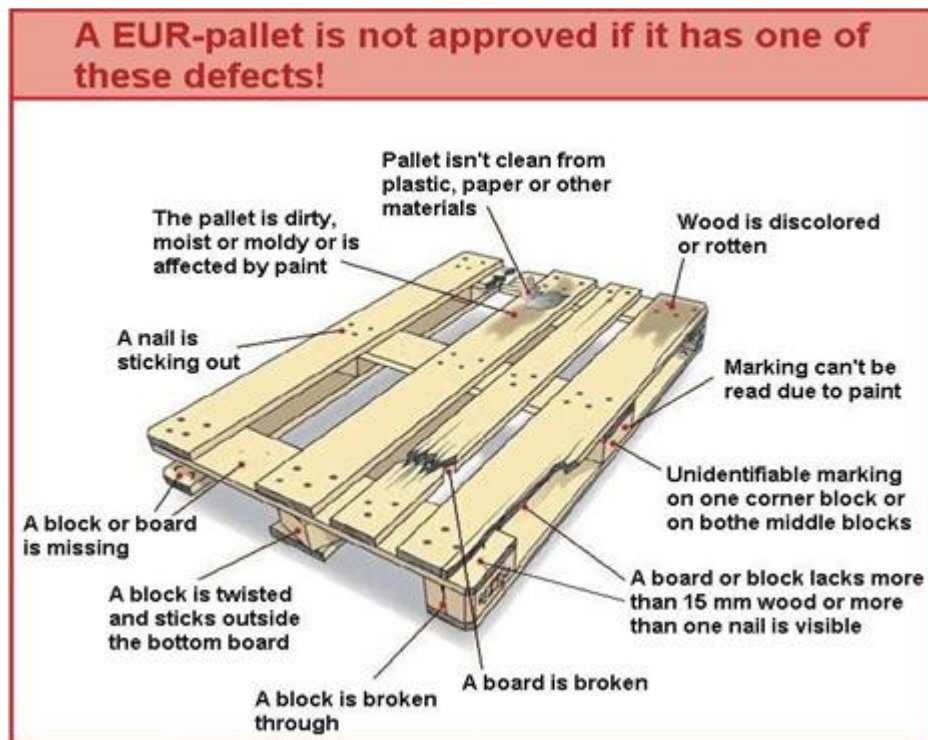


Figure 18 Defect pallets must not be used

4.3.2. Special yellow goods flag for initial sampling and prototypes

For delivery of prototype material or initial samples, the goods must always be supplemented with a yellow goods flag (both bar 1 code flag and 1 initial sample flag). This gives us a clear visual signal that the goods shall be treated separately. The supplier must specify the information highlighted in red in figure 19.

Artikelnr / Part No....4812114521.....

☐ **Prototyp / *Prototype***

☒ **Utfallsprov / *Initial sample***

☐ **Första leverans / *First delivery***

☐ **S/N-uppföljning / *S/N Tracking***

Enligt / According to: ...ECN22085, Order 1543567

WIKELINK

Figure 19 Goods flag for initial samples and prototypes

5. Claims

5.1. Claims for defective material (DR)

All parts must be delivered in accordance with the valid drawings and packing instructions. In cases where delivered material does not comply with our requirements the parts will be claimed via a fault feedback system (Discrepancy Report). The objective of the feedback is to create the opportunity for the supplier to improve their processes and to recover the costs incurred as a result of the fault. DR is an electronic form that contains a description of the fault. It is sent to the supplier by email and must be handled as follows:

1. The discrepancy is described by Dynapac's quality technicians.
2. Dynapac notifies what measures have been taken under "Corrective action". The supplier must describe how the fault will be corrected in the white field. This response must be returned to Dynapac within 1 working day.
3. The supplier must describe under "Preventive action" the long term measures that will be implemented to prevent the fault occurring again. The report will be closed when this response is received from the supplier and the measures are considered to be adequate.
4. In cases where we have returned the goods to the supplier and receive a replacement delivery, this must be marked with the DR number and the name of the person who has issued the report.
5. An opening fee (1200 SEK), labor cost, plus the part price and return freight, are debited to the supplier via a "claim invoice", for which no payment shall be made. The re-imbursement will instead be deducted from the supplier's current invoices. It is therefore not necessary to send a credit note. A replacement delivery shall therefore be invoiced accordingly.

DYNAPAC Discrepancy Report

☐ Internal ☒ External

Supplier Hörsås Purchaser J. B.		Report No DR10100	
Part No 37876		Date 2008-03-25	

Machine part code: 100 Cartridge

Discrepancy
Färg på passningsnytt, smuttslag lock. Se bifogad sammanställning och foto.

Corrective action
Supplier: Geringgående med operator, utförande av inspektioner.
Customer: Åtgärdat internt. Kvalitet och intern hantering kommer till "normalt" i 5 st skickas tillbaka till leverantören enligt överenskommet.

Preventive action
Supplier: Byt av underleverantör från AAA till BBB.
Customer:

Follow-up
☐ New trial samples
☐ Repeat of SUPPLIER'S FINAL INSPECTION

On Replacement Delivery: Label goods with ReportNo and our Inspector

Dynapac: Compaction Equipment AB
Org No 556069-6577 VAT No: SE556069657701
Postal address: Västing adress
Box 304
Industrihusvägen 2
SE-571 23 Kålleås
Sweden
Tel: +46 465 30 60 00 Fax: +46 465 30 61 00

CLAIM INVOICE

Financial contact Inger Carlsson		Invoice No INVOICE NO DR10100 1	
Supplier ID Verification supplier		Billing Address COMPA AB	

Part No	Description	Unit	Ordered	Shipped	Received	Total Price
37876	BEARING HOUSING	ST	3	1	1	5 125.00
	SPAREPART NUMBER	TRM	25	400	0	10 500.00
TOTAL SEK						15 625.00

OBS! Denna faktura skall ej betalas av er utan avdrages vid nästa faktura.

Note! This invoice shall not be paid by you but will be deducted in our next remittance

ANTAL/AVVIKELSE/QUANTITY DISCREPANCY
Quantities/Avvikelse
Ordermängd och skickat varuslag är korrekta till 5 st och skickas till denna DR enligt överenskommet. Överdragen skickas till denna DR enligt överenskommet. Överdragen skickas till denna DR enligt överenskommet. Överdragen skickas till denna DR enligt överenskommet.

KVALITET/AVVIKELSE/QUALITY DISCREPANCY
Kvalitet/Avvikelse
Vi kommer att leverera korrekta skickade varuslag till denna DR enligt överenskommet. Vi kommer att leverera korrekta skickade varuslag till denna DR enligt överenskommet. Vi kommer att leverera korrekta skickade varuslag till denna DR enligt överenskommet.

Dynapac: Compaction Equipment AB
Org No 556069-6577 VAT No: SE556069657701
Postal address: Västing adress
Box 304
Industrihusvägen 2
SE-571 23 Kålleås
Sweden
Tel: +46 465 30 60 00 Fax: +46 465 30 61 00

Figure 20 Example of discrepancy report and the claim invoice

5.2. Claims on basis of incorrect packing or goods labelling

Goods must be packed in accordance with the packing instruction and the instructions mentioned in this manual.

If the supplier fails on this, a claim will be issued to the supplier to draw attention to the fault. If the supplier does not improve its process and this repeatedly leads to repacking or manual goods reporting, e.g. as a result of incorrect barcodes, a claim will be issued via the DR system (Logistic DR) and the costs debited to the supplier in the same way as a claim for defective material.

5.3. Claims on basis of incorrect specified quantity

Occasionally the actual number of delivered items does not correspond to what is specified on the delivery note. In general this means that the applicable invoice does not correspond with what has been delivered. In cases like this the information about the deviation is sent to the supplier. The invoice will be paid, but the difference between the invoice quantity and real quantity will be deducted via a corresponding "claim invoice" from current invoices. Before this is done the supplier has 1 working day to respond to the deviation and to send the missing quantity at own expense.

6. Engineering Change Notification (ECN)

We continuously improve our products and processes. When a design is changed the technical specifications that describe the purchased product are also changed. The more significant a change is, the more important it is that the supplier participates in this process. Occasionally this only refers to minor adjustments, or the adjustment of valid documents, but most often it is a question of physical changes to the products we purchase. If a change affects other parts of Dynapac's installation this must be coordinated with other changes. It is therefore necessary for the supplier to introduce the change in accordance with the date we have specified on the "change order". The supplier's responsibility is to:

- Implement the change so that serial delivery can take place from the date specified on the change order.
- Sign and resend the change order from within two weeks as confirmation that the supplier has received our request for the change, and that it is implemented in accordance with the specified requirements.
- Immediately notify Dynapac if the date for the implementation risks being delayed, or if there are other aspects that should be taken into consideration.
- Send the material in a new version labelled with Dynapac's yellow goods flag, containing the specified order number or reference, and to enclose a correctly completed document for initial samples.
- Costs, as a result of the engineering change, shall be agreed on before invoicing. The invoice shall be marked with corresponding ECN number.

6.1 How the ECN should be handled

Change orders must be interpreted and handled as follows:

1. Change order number
2. Purchase order number for material with new revision. If no specific order has been specified the material in a new revision must be delivered as per the valid reference number, and labelled with a yellow goods flag.
3. [Tillverkade/Manufactured] explains how the supplier should handle the parts which according to agreement have already been manufactured or are being manufactured.
4. This section describes the documents that are changed and where appropriate summarizes the actual change or other comments that can be of importance.
5. [Leveransstart/First delivery] explains from which week the deliveries shall consist of products in the new revision. The start of delivery is specified by year [y] and week [w].
6. Concerning costs for the change, according to committed volumes.
7. The supplier confirms that the new documents have been received and the changes to the design will be implemented. The form must be returned within two weeks after it has been issued by Dynapac.
8. The supplier's signature

DYNAPAC				ÄNDRINGSORDER TILL LEVERANTÖR ENGINEERING CHANGE ORDER FOR SUPPLIER	
Tjänsteställe/Department	Vår kontakt/Our contact	Datum/Date	Ändringsorder/ECN-number		
Logistik/Logistics	Bengt Andersson	2008-01-07	07999 1		
Arkivnummer/Part number	Beskrivning/Description	Ny rev./New rev.	Leverantör/Supplier		
165338	Bullerddämpad huv	A	Huvspecialisten AB		
		K	Inköpsorder/Purchase order		
			1799228 2		
<input type="radio"/> Tillverkad/Manufactured		<input type="radio"/> Under tillverkning/Under construction		<input type="radio"/> Utfallsprov levereras/Delivery of initial sample	
<input type="radio"/> Påverkas ej/Not affected		<input type="radio"/> Påverkas ej/Not affected		<input type="radio"/> Enligt order/According to purchase order	
<input checked="" type="radio"/> Förbrukas/To be used		<input checked="" type="radio"/> Förbrukas/To be used		<input type="radio"/> Med första serieleverans i nytt utförande/	
<input type="radio"/> Ändras/To be changed		<input type="radio"/> Ändras/To be changed		With first serial delivery of new revision	
<input type="radio"/> Skrotas/To be scrapped		<input type="radio"/> Skrotas/To be scrapped		<input type="radio"/> Krävs ej/Not requested	
Ritningsnummer/Drawing number	Gällande rev./Valid rev.	Ny rev./New rev.	Anmärkning/Remark		
386525		A	Handlag flyttas, mått 75 var 70.		
386568	A	B	Håll dia 17 mm tillkommer		
Ovanstående artikel är föremål för ändring. Hänsyn härtill skall tagas i Er planering. Var god lämna besked om eventuella kostnader för denna ändring som uppstår inom ramen för gällande avtal.					
We are planning to change this part. Consideration must be taken in your planning. Please advise additional costs within terms of valid agreements.					
Serielieferansstart i nytt utförande/ Serial delivery of new revision starts [åvv] / [yww]:					
815 5					
KOSTNADER/COSTS					
Engångskostnader/Start up costs					
Omarbeting/Rework					
Skrotning/Scrap					
Verktygsändring/Changing of tooling 6					
Styckpris/Unit price					
Gällande/Valid					
Ändrad materialkostnad/Changed material costs					
Ändrad bearbetningskostnad/Changed labour costs					
Nytt pris/New price					
Leverantörs kommentarer/Supplier comments:					
Var vänligt makulera tidigare ritningsutgåvor och bekräfta att ni fört in den nya utgåvan i enlighet med denna ändringsorder. Bekräfta genom att signera denna blankett och återända den till oss inom två veckor.					
Please discard earlier issues and confirm that the new issue will be introduced in accordance with this change order. Confirm by resending this document within two weeks.					
Dynapac Compaction Equipment AB		Leverantör/Supplier			
Datum/Date		2008-02-29			
Signatur/Signature BA		Signatur/Signature Pelle Jönsson 8			
		Namnförtydligande/Clarification Pelle Jönsson			
Postal address		Telephone		Telefax	
Box 504					
371 23 Karlskrona		Nat 0455 30 60 00		Nat 0455 30 61 00	
Sweden		Int +46 455 30 60 00		Int +46 455 30 61 00	

Figure 21 Engineering Change Order

7. Supplier evaluation

7.1. SPM index

The supplier's delivery performance and quality level are continuously measured in ongoing serial production. The four parameters below are weighted and establish a so called SPM index (Supplier Performance Measurement Index).

- Delivery precision (only late deliveries)
- PPM (Parts Per Million) How many faults there are on one million parts.
- Number of Discrepancy Reports (DR)
- Number of disturbances to production or line stops
- Number of Logistic Discrepancies (faulty packaging, faulty goods marking etc.)

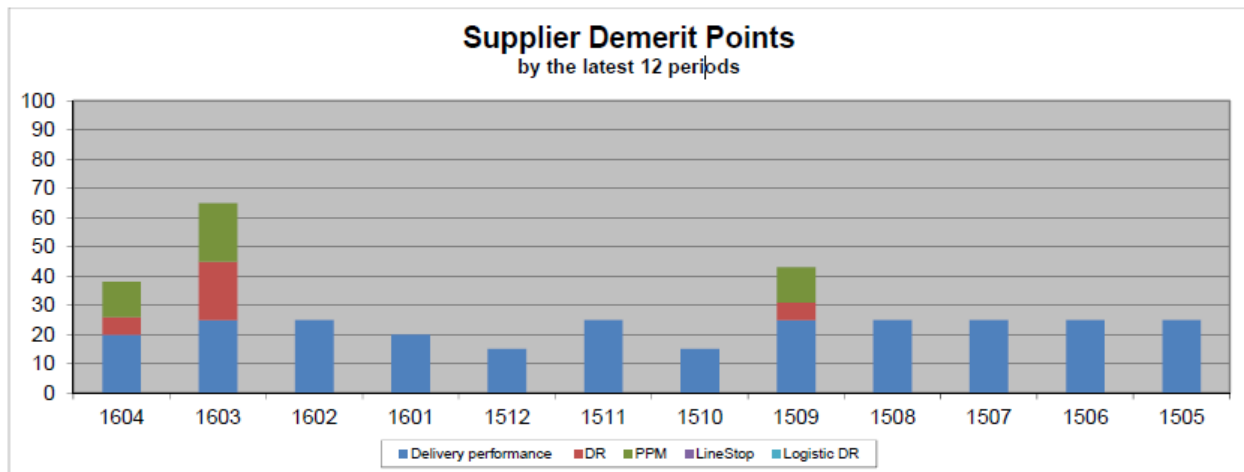


Figure 22 Supplier Performance Measurement (SPM) for a specific supplier

The above information is summarized and gives a value between 0 and 100. The fewer demerit points, the better the performance. The measurements are compiled once a month for the previous month.

Table 4 shows how the supplier's performance affects the demerit points.

Deliveries on time	Demerit points	Number of DR	Demerit points	PPM value	Demerit points	Line stops	Demerit points	Logistic DR	Demerit points
98-100%	0	0	0	0	0	0	0	0	0
90-97%	5	1	6	1-1000	5	1	20	1	5
80-89%	10	2	10	1001-3000	8			2	10
70-79%	15	3	15	3001-6000	12			3	15
60-69%	20	>4	20	6001-9000	16				
< 60%	25			> 9000	20				

Table 4 Demerit points

7.2. Delivery performance index

The Delivery performance can be found in PipeChain under “Delivery Report” (please the PipeChain Manual) and your purchaser can send or show you the measurements in our Power BI tool QBIM.

When analyzing the supplier’s delivery performance, one has to take into consideration the following:

- Delivery performance is measured in three ways:
 - The difference between our requested delivery date and the actual delivery date (dispatch date). DP (Dmd) in the latest version of PipeChain.
 - The difference between your first confirmed delivery date and the actual delivery date (dispatch). DP (FC) in the latest version of PipeChain.
 - The difference between your last confirmed delivery date and the actual delivery date (dispatch). DP (LC) in the latest version of PipeChain.
- The measurement allows zero days for late deliveries but five days for "early" deliveries in QBIM but not in PipeChain.
- Note however that deliveries shall take place on the agreed day, not earlier and not later.



Figure 23 Supplier Delivery Performance in QBIM

	Supplier Id	Customer Product Id	Date	Rows	Delivery Id	Delivery Note Id	Delivery Type	Purchase Order Id	Order Date	DP (D)	Dmd Shipment Time	DP (FO)	First Confirmed Shipment Time	DP (LO)	Last Confirmed Shipment Time	Latest Shipment	Dmd Qty	First Confirmed Qty	Last Confirmed Qty	Shipped Qty	Count Reconfirm
1	101266	4812111950	2019w05	1	DO8078600	2019/ZU/00263	Purchase_Order	1285242	2019-01-23	0.0%	2019-02-21	0.0%	2019-02-21	100.0%	2019-02-01	2019-02-01	15	15	15	15	15
2	101266	4812110769	2019w05	1	DO8068680	2019/ZU/00245	Purchase_Order	2172492	2019-01-20	0.0%	2019-02-21	0.0%	2019-02-21	100.0%	2019-02-01	2019-02-01	12	12	12	12	12
3	101266	4812112669	2019w04	1	DO8068769	2019/ZU/00222	Purchase_Order	2172398	2019-01-20	0.0%	2019-02-14	0.0%	2019-02-14	0.0%	2019-01-25	2019-01-25	10	18	18	18	10
4	101266	4700387956	2019w05	1	DO8056900	2019/ZU/00239	Purchase_Order	2172326	2019-01-19	0.0%	2019-02-21	0.0%	2019-02-21	100.0%	2019-02-01	2019-02-01	50	50	50	50	50
5	101266	4812113107	2019w04	1	DO8042788	2019/ZU/00195	Purchase_Order	2171904	2019-01-13	0.0%	2019-02-14	0.0%	2019-02-14	0.0%	2019-01-25	2019-01-25	16	30	30	30	16
6	101266	4812113107	2019w06	1	DO8042788	2019/ZU/00195.1	Purchase_Order	2171904	2019-01-13	0.0%	2019-02-14	0.0%	2019-02-14	0.0%	2019-01-25	2019-02-08	30	30	30	30	30
7	101266	4812114872	2019w04	1	DO8042836	2019/ZU/00194	Purchase_Order	2171847	2019-01-13	100.0%	2019-01-25	100.0%	2019-01-25	100.0%	2019-01-25	2019-01-25	15	15	15	15	15
8	101266	4812118133	2019w06	1	DO8042683	2019/ZU/00196	Purchase_Order	2171894	2019-01-13	0.0%	2019-02-07	0.0%	2019-02-07	100.0%	2019-02-08	2019-02-08	12	12	12	12	12
9	101266	4812125908	2019w04	1	DO8042833	2019/ZU/00174	Purchase_Order	2171889	2019-01-13	100.0%	2019-01-25	100.0%	2019-01-25	100.0%	2019-01-25	2019-01-25	4	4	4	4	4
10	101266	4812125908	2019w05	1	DO8042834	2019/ZU/00176	Purchase_Order	2171890	2019-01-13	0.0%	2019-02-14	0.0%	2019-02-14	100.0%	2019-02-01	2019-02-01	4	4	4	4	4
11	101266	4812110769	2019w05	1	DO8035870	2019/ZU/00187	Purchase_Order	2171770	2019-01-12	0.0%	2019-02-14	0.0%	2019-02-14	100.0%	2019-02-01	2019-02-01	12	12	12	12	12
12	101266	4812125908	2019w05	1	DO8041138	2019/ZU/00175	Purchase_Order	2171783	2019-01-12	0.0%	2019-02-14	0.0%	2019-02-14	100.0%	2019-02-01	2019-02-01	4	4	4	4	4
13	101266	4812126116	2019w06	1	DO8040415	2019/ZU/00190	Purchase_Order	2171784	2019-01-12	0.0%	2019-02-14	0.0%	2019-02-14	100.0%	2019-02-08	2019-02-08	2	2	2	2	2
14	101266	4812126291	2019w06	1	DO8030682	2019/ZU/00177	Purchase_Order	2171606	2019-01-11	100.0%	2019-02-08	0.0%	2019-02-07	100.0%	2019-02-08	2019-02-08	1	1	1	1	1
15	101266	4812119497	2019w06	1	DO8028174	2019/ZU/00129	Purchase_Order	2171455	2019-01-10	0.0%	2019-02-07	0.0%	2019-02-07	100.0%	2019-02-08	2019-02-08	20	20	20	20	20
16	101266	4812118681	2019w06	1	DO8026217	2019/ZU/00126	Purchase_Order	2171366	2019-01-09	0.0%	2019-02-07	0.0%	2019-02-07	100.0%	2019-02-08	2019-02-08	10	10	10	10	10
17	101266	4812118681	2019w06	1	DO8026217	2019/ZU/00126	Purchase_Order	2171366	2019-01-09	0.0%	2019-02-07	0.0%	2019-02-07	100.0%	2019-02-08	2019-02-08	10	10	10	10	10

Figure 24 Supplier Delivery Performance in PipeChain



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