



**ENGEL**

## **Packaging Guideline**

ENGEL Austria and ENGEL Strojirenska spol s.r.o.

## Table of contents

1	Introduction .....	3
2	Scope of application .....	3
3	Packaging requirements .....	4
3.1	Weight and dimensions .....	4
3.2	Labelling .....	4
3.3	Packaging and protection against damage .....	5
4	Identification of the goods .....	5
4.1	Shipping notification .....	5
4.2	Notification options .....	6
4.3	Delivery modality .....	7
4.4	Part identification / Identification tags .....	9
4.4.1	Special requirements for materials with serial numbers .....	9
5	Approved packaging types .....	11
5.1	Reusable packaging .....	11
5.1.1	Empties management .....	11
5.1.2	Exchange of empties .....	12
5.2	Disposable packaging .....	13
6	Transports .....	15
6.1	International Transports .....	15
6.2	Sea freight .....	15
6.3	Container .....	15
6.4	Hazardous goods packaging .....	15
6.5	Additional Information .....	15

## List of abbreviations

EA	Engel Austria GmbH (Schwertberg plant, St. Valentin and Dietach)
EDI	Electronic Data Interchange
EMCZ	Engel Strojirenska spol s.r.o.
EPAL	European Pallet Association
SCM	Supply Chain Management
SRM	Supplier Relationship Management
VDA	Verband der Automobilindustrie (Automotive Industry Association)

## Change directory

Change of rev. nr.	Chapter	Description of change	Change initiated from	Reason of change
1	Chapter 4	Detailed delivery specification Materials with serial numbers	GR dept.  Engineering dept.	EWM  Serial number requirement

Author/Date Wolfinger 2020-03-06	Checked/Date Buchbauer 2020-03-06	Effective/Date Pernsteiner 2020-03-06	Revision 1	Doc. No. P03-GSC-001	replaces Doc. No.	Page/of 2/15
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# 1 Introduction

The purpose of this guideline is to provide suppliers with information on the packaging requirements of Engel Austria GmbH and Engel Strojírenská spol s.r.o.. The following provisions should serve to ensure an efficient and trouble-free material flow between suppliers and Engel Austria GmbH or Engel Strojírenská spol s.r.o. by defining

- optimal container and packaging design
- standardized dimensions
- adequate content and packaging

The current and effective version of the packaging guideline can be found on the Engel Portal and under the following link: <https://www.engelglobal.com/de/at/unternehmen/einkauf/aebs.html>. Printed packaging guidelines may reflect an older status or contain paragraphs that are no longer in effect.

# 2 Scope of application

- This standard applies to all suppliers of Engel Austria GmbH (EA) and Engel Strojírenská spol s.r.o. (EMCZ) and any kind of materials.

## Engel Schwertberg

Ludwig Engel Straße 1, 4311 Schwertberg  
Off-site storage facility: Schusterhalle, Bahnhofstraße 7a, 4481 Asten

## Engel St. Valentin

Plant: Steyrer Str. 20, 4300 St. Valentin  
Off-site storage facility: Hummelfeldstraße 15, 4300 St. Valentin

## Engel Dietach

Ludwig-Engel-Straße 1, 4407 Dietachdorf

## Engel Czech Republic

Českobudějovická 314, 382 41 Kaplice, Czech Republic

- If specific packaging regulations or technical delivery conditions have been agreed in writing between a supplier and Engel, these shall apply in addition to these general guidelines.
- The packer or shipper shall be liable for the state of delivery of the delivered goods in accordance with the agreed INCOTERMS.
- If a delivery is not properly packed, a logistics complaint will be filed. The supplier must process this within 48 hours and return it to Engel. Engel reserves the right to charge repacking costs to the supplier or to refuse acceptance of the goods.
- Any deviation from the packaging guidelines according to this standard requires a written exception approval of the respective EA or EMCZ plants.
- For deliveries of spare parts, coordination with the CSD (Customer Service Division) is required in addition to this guideline.

						Page/of 3/15
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### 3 Packaging requirements

It is the supplier's responsibility to ensure that the goods reach their destination at EA and EMCZ in the agreed quality, the correct quantity, on the agreed date and with the correct labelling.

Each delivered material must be packaged according to its material character, which enables safe manipulation, storage and use of storage technology.

In order to meet the requirements of the packaging guideline and to avoid unnecessary environmental impact, only environmentally friendly materials should be used. Unnecessary overpacks must be omitted in order to minimise unpacking and disposal costs.

### 3.1 Weight and dimensions

- In the case of packaged articles which cannot be moved by forklift, crane or other means of transport, the total weight of the article is not to exceed 15 kg.
- Since automated material flow systems perform contour inspections, the packaged goods and the packaging materials may not exceed the external contours of the load carriers without prior agreement.

### 3.2 Labelling

- Goods that require special manipulation due to their properties must be properly labelled (e.g. symbol plates, written marking, etc.). Necessary safety data sheets must be enclosed.
- The parts declared as initial samples in the purchase order shall be labelled by the supplier with the respective initial sample label on the package.



Initial sample sticker

- If goods have been delayed, or when a delivery is urgent according to the dispatcher, the supplier must label them "URGENT" so that this can be identified immediately upon unloading. Please attach a printed label (landscape format) directly under the shipping label on the package. Use capital letters and red font Arial 100 pt.

### 3.3 Packaging and protection against damage

- In the case of materials that are being delivered in cardboard boxes, the supplier is obligated to pack items separately by type. This means that materials must not be mixed. Each material must have its own packaging.
- Empty spaces in packaging must be stuffed with neutral, non-dusting and environmentally friendly filling material.
- When stacking the goods, stability, protection against slipping and the lowest possible centre of gravity must be ensured. If necessary, use only plastic strapping and original pallet frame.
- Each delivery unit must be secured against damage and slippage by means of an outer shell, shrink wrap, wooden wedges or a sleeve.
- Transport and packaging damage caused by inadequate packaging will be charged to the supplier.
- The processed material must be treated in such a way that covered transport and short-term storage without corrosion damage are possible.
- Round materials should generally be delivered with wooden wedges to prevent slippage.

## 4 Identification of the goods

Simple and clear labelling is required for an effective receiving process. We ask you to send a shipping notification electronically in advance.

### 4.1 Shipping notification

The shipping notification is an electronic document containing detailed information about an upcoming shipment. Engel expressly requests that suppliers contact the responsible purchaser for electronic notification. It is very important that the shipping notification is sent correctly and promptly after pick-up.

When sending materials with serial number requirement the shipping notification has to contain the corresponding serial numbers.

						Page/of 5/15
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## 4.2 Notification options

- **SRM Portal**

Go to the portal, select the respective order and click "Enter shipping notification":

Bestellungen für Kollmorgen, s.r.o.

Sicht: [Standardsicht] Excel PDF Beleghistorie Auftragsbestätigung erfassen Lieferavis erfassen Elektronische Bestätigung

PDF	Abw	Best	Adresse	WA	WE	Dok	Ret	EntBeleg	Pos	BelegDat	Werk	Material	Materialkurztext	Bestellmenge	BME	Lieferdatum
								4503668210	10	15.10.2018	0014	02201-3736	MTR SERVO AKM44G-ANSNGF02	5	ST	17.10.2018

g data has to be entered:

y note number, supplier

y date

r contact person

y

umber

**Lieferavis erfassen 4503668210-00010** Documente hochladen

**Daten zur Anlieferung**

Ihre Lieferachtnummer:

Änderter datum:

Sachbearbeiter: Carina Weber

**Zahlungs- und Lieferbedingungen**

ZAHlungsBEDINGUNGEN  
within 14 days 2 % cash discount within 30 days Dyn net

LIEFERBEDINGUNGEN  
DAP

**Daten bestätigen**

Bestellmenge: 5 ST

Materialnummer: 02201-3736 MTR SERVO AKM44G-ANSNGF02

Lieferantenmaterialnummer: AKM44G-ANSNGF02

Sie geben Sie die Liefermenge an:

Menge:  5 ST

Gewünschte Menge: 1 ST

Navigation: Zurück, Printen, Beenden

A detailed SRM user documentation can also be found on the Engel Portal and under the following link: <https://www.engelglobal.com/de/at/unternehmen/einkauf/aebs.html>.

An Engel delivery note will then be provided for the delivery.

- **Shipping notification by EDI/SCM**

An IDoc (old: DESADV01 new: DELVRY07) is sent to the Engel interface. From there, the IDoc is transferred to SAP and processed.

When entering the shipping notification via the SRM portal, for deliveries of materials with serial number requirement, the relevant serial numbers must be included in the standard segment of the IDOC.



### 4.3 Delivery modalitiy

#### Normal orders (45\*)

##### Delivery note

Each delivery must be accompanied by a delivery note containing at least the following data:

- Delivery address (of the respective Engel plant)
- Sender incl. supplier number
- Delivery note date
- Engel purchase order and item number
- Engel material description, Engel material number, Engel drawing number
- Delivery note number
- ASN number in plain text as well as in machine-readable form (data matrix code, code 128 or code 39) – ATTENTION: the transmitted ASN number must be the same number like the printed ASN number and barcode on the delivery note.
- Total number of items, pieces and unit of measure per article delivered
- Number of packages
- Container type with Engel container number if available
- Serial numbers in plain text as well as in machine-readable form (data matrix code, code 128 or code 39), if materials are requiring serial numbers are included in the delivery. As an alternative to attaching the serial numbers to the delivery note, an additional goods receipt note with the serial numbers of the delivery can be enclosed

Example Company Müller

Consecutive number

Delivery note number

Customer number

Order number and position

Delivery date

Engel-order number and position  
4503482685/00020

ENGEL supplier ID

Supplier name

Supplier address

ENGEL AUSTRIA GmbH  
Ludwig-Engel-Straße 1  
43111 Schwerberg  
Phone: +43 50 620 – 0  
Web: [www.engelglobal.at](http://www.engelglobal.at)

ENGEL delivery plant

Delivery note

Thank you for your order. We deliver the following positions:

Pos.	Material description	Amount	Unit	Unit price	Total price
1	Engel-description Engel-material number Engel-drawing number	5	pcs.	45,00 €	225,00 €
2	Engel-description Engel-material number Engel-drawing number	1	pcs.	15,00 €	15,00 €
Total number		6	pcs.		

e.g. gearbox 0736-721-33-22, 04502-0336

Total quantity and per position, unit per article

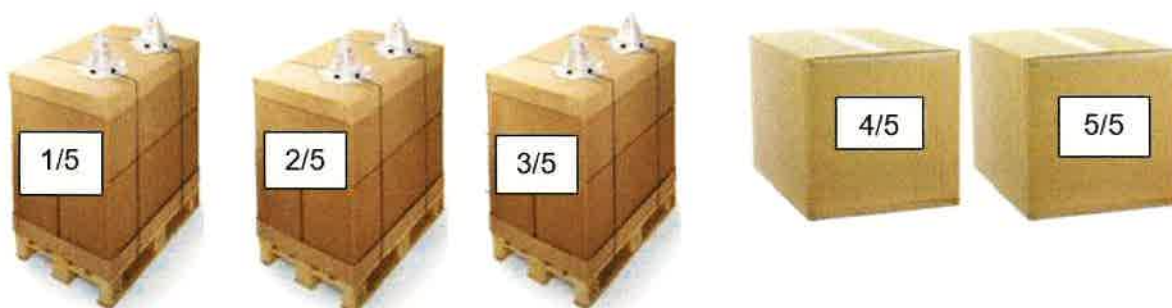
number of packages and pallets

Delivery dimensions: 2 euro pallets 1,2 x 0,8 x 0,8, 480kg.

### Delivery instructions

If a delivery includes several pallets, a **delivery note** and an ASN must be created for **each pallet or package (number of packages = number of ASN)**. If this is not possible, a **packing list per package** must be enclosed in addition to the delivery note. Materials with different unloading gates must be packed separately.

If a delivery contains several packages, these must all be numbered.



Additionally, in the case of materials requiring serial numbers, the serial number must be attached to the package label and to the goods using an appropriate type plate.

### **SCM Orders (47\*)**

#### Delivery note

For SCM orders, the same basic data of the delivery note applies as for normal orders. In addition, the delivery charge must be printed on the SCM delivery note. The delivery charge includes:

- the order number and
- the production supply area.

#### Delivery instructions

It is necessary to deliver separately to production supply area. In exceptional cases, it must be delivered separately to delivery charges (=order number and production supply area).

For all orders applies:

- SCM-orders (Orders with nr. 47\*) and normal orders (beginning with 45\*) must be physically separated
- The delivery note and accompanying documents shall be attached on the outside, protected and clearly visible in a delivery note pocket.
- The delivery note has to be attached to the front face of the package.
- Each package must be clearly identified (sender, recipient, order number, item number, quantity).

						Page/of 8/15
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## 4.4 Part identification / Identification tags

SRM and SCM supplier have to use the labels provided in the respective portal. If no Engel standard has been specified, please use the most recent version of the VDA tag. Please use paper, cardboard or labelled PE foils and do not glue, but rather apply with easily removable and residue-free adhesive dots or materials. Wired tags are not permitted for reasons of accident prevention.

For the identification of the goods, the current VDA status must contain a minimum of information:

- Sender
- Recipient
- Material number
- Order number and position
- Material description.
- Delivery charge (only at SCM)



Example VDA Tag, Version 4994



The position of the VDA is fixed. The VDA tag is to be attached to the upper left corner of the front side.

### 4.4.1 Special requirements for materials with serial numbers

The serial number must be shown on the package tag on the individual packaging and on the goods using a suitable type plate.

Must-have:

- Unique serial number of purchased good (plain text)
  - Unique serial number of purchased good (bar code)
- Serial number of purchased good without application Identifier

Possible bar codes:

- Data Matrix Code (preferred)
- Code 39
- Code 128

Optional:

- ENGEL material number (plain text)
  - ENGEL material number (barcode)
- ENGEL material number without application identifier to verify the material in its storage location (actually used by EMCZ)


Possible bar codes (actually in use at ENGEL):


- Data Matrix Code (preferred)
- Code 39
- Code 128

						Page/of 9/15
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# Examples for type plates and packaging labels

## Examples for ENGEL intern used type plates

<b>Werk Kaplice</b>		<b>ENGEL</b>	
<b>Podest</b>	<b>Type:</b>	P5 Schaltschrank	
<b>Mat.:</b> 0384-950-85-00	<b>Weight:</b>	350 KG	
<b>Ser.:</b> 100009567			
			
<b>Manuf. Date:</b> 2018		<b>Made in:</b> CZECH REPUBLIC	

<b>Werk Schwertberg</b>		<b>ENGEL</b>	
<b>Durchflussregler</b>	<b>Type:</b>	FLOMO-40L-4X-#3	
<b>Mat.:</b> 0728-723-51-00-011	<b>Weight:</b>	20 KG	
<b>Ser.:</b> 100000031	<b>Tech.Data:</b>	24 V / 0.2 A	
			
<b>Manuf. Date:</b> 2014		<b>CE</b> <b>Made in:</b> AT	

## Examples for supplier used type plates

<b>KBox A-150-KBL-ENGEL</b>	
MPN: ENGEL 02203-8506	MPN: EN00-02R001 P3 Rev. 01
	
EDGE Device	LISTED I.T.E. E284301
Production Date: 2019-07	73587500015 088
	
	3-30V Imax = 1.0 A
	Made in Germany

<b>Type:</b> QXEH42-025R451	
<b>Art.Nr:</b> 100034604	
<b>P:</b> 250 bar	<b>V:</b> 025 cm³/U
<b>Mat.Nr:</b> 02004-1084	<b>Ser.Nr:</b> 123456
<b>MADE IN GERMANY</b>	

## Example for packaging labels

<b>Gerätetyp</b>

<b>S/N:</b>







## 5 Approved packaging types

For the EA and EMCZ plants, the following packaging units conforming to the environmental protection standards are approved.

### 5.1 Reusable packaging

The delivery of goods in reusable packaging is only permitted on the following pallet types.

Name	External dimensions	max. weight	Image
<b>Euro Pallet EPAL 1 EN 13698-1</b>	1200x800x144 mm	1,000 kg	
<b>Euro Pallet EPAL 6</b>	600x800x144 mm	1,000 kg	
<b>Euro Pallet with OEBB stacking frame</b>	1200x800x544 mm	1,000 kg	
<b>Euro Pallet with OEBB stacking frame</b>	1200x800x344 mm max. 2 stacking frames 1200x800x544 mm	1,000 kg	

Other types of reusable packaging and pallet structures must be approved by Engel for each respective use.

#### 5.1.1 Empties management

##### Quality criteria according to EPAL

The following table shows the damages to a pallet that prohibit an exchange. In case of the delivery of bad pallets, skeleton boxes and stacking frames, empties will not be exchanged.

##### NON-EXCHANGEABLE EURO PALLETS:

If Euro Pallets show one or more of the following damages, the pallets are not exchangeable and must be repaired according to the regulations of UIC leaflet 435-4.

						Page/of 11/15
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A bottom or deck board is splintered in such a way that more than one nail or screw shank is visible.



The EUR stamp on the right and the rail sign on the left are missing.



A block is missing or split in such a way that more than one nail is visible.



A board is missing.



A board is broken crosswise or diagonally.



More than two bottom or top edge boards are splintered in such a way that more than one nail or screw shank is visible.



In addition, there will be no exchange in the following situations:

- The load-bearing capacity is no longer guaranteed (rotten and crumbling, heavy splintering).
- The level of soiling is so severe that the goods will become soiled.
- Heavy splintering is present on several blocks.
- Obviously inadmissible components have been used (e.g. too thin boards, too narrow blocks).
- Euro Pallets that are defaced (e.g. if they have been nailed).
- Stacking frames or lids labelled with the supplier's name, for example, are considered disposable packaging. An original exchange is not possible.
- Disposable pallets are not exchanged.

### 5.1.2 Exchange of empties

						Page/of 12/15
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- **Reusable/Euro Pallets:**

Only a 1:1 exchange is possible for returnable/Euro Pallets. This means that when goods are delivered on original Euro Pallets in perfect condition, the supplier or his carrier can immediately take back the same number of empty Euro Pallets.

Example: Delivery of goods on 6 original Euro Pallets, 3 original pallets with lateral roll-off protection nailed on, and one disposable pallet.

6 original Euro Pallets will be exchanged with the supplier or carrier. The 3 converted Euro Pallets cannot be exchanged because they are no longer in their original condition.

- **Stacking frame:**

Engel collects up to 5 stacking frames on one pallet. The supplier undertakes to collect these at his own expense (by own transport or forwarding) after a delivery of materials on 5 pallets with stacking frames. If the supplier does NOT comply with this agreement, the empties will be returned to him at his own expense after expiry of a deadline (30 days for monthly delivery and 14 days for weekly delivery). A detailed clarification must be made between Engel and the supplier.

## 5.2 Disposable packaging

The standard one-way packaging for larger parts is the disposable pallet. Other substructures that allow the manipulation of goods by means of a storage vehicle are also permitted. Cardboard boxes without a pallet are only permitted if they do not exceed the total weight of 15 kg mentioned above.

Further regulations for disposable packaging:

- **Packaging materials:**
  - All disposable packaging must be made of environmentally friendly, recyclable materials that are accepted for recycling throughout the region. The use of food as packaging material is not permitted for EA/EMCZ.
  - Material combinations or joints must be avoided or kept to a minimum and must be separable after use (e.g. iron staples or wood nails).
  - Composite materials and packaging chips are to be used only after a part-specific approval.
  - Tape and packing straps as well as labels and material tags shall not limit the recyclability of the carrier material.
- **Labelling:**
  - All disposable packaging must be clearly and visibly stamped with standardised images and abbreviations in accordance with DIN 6120ff or with symbols recognised by the waste disposal industry. The stamp shall not restrict recyclability.

						Page/of 13/15
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The following table gives an overview of the materials approved for disposable packaging. Materials that deviate from the approved materials must be discussed with the relevant warehouse logistics departments and approved.

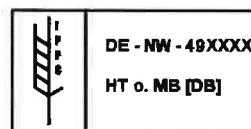
Type	Approved material	Example for inadmissible material
<b>Cardboard boxes</b>	<ul style="list-style-type: none"> <li>Pollutant-free cardboard boxes</li> </ul>	<ul style="list-style-type: none"> <li>Papers and cardboards with water-soluble coatings or adhesives</li> </ul>
<b>Corrosion protection paper</b>	<ul style="list-style-type: none"> <li>VCI papers that are demonstrably recyclable together with paper/cardboard (VCI: volatile corrosion inhibitor)</li> </ul>	<ul style="list-style-type: none"> <li>Papers with incompatible additives</li> <li>Incompatibly impregnated or saturated paper (e.g. bitumen, oil and wax paper)</li> </ul>
<b>Plastics</b>	<ul style="list-style-type: none"> <li>Moulded parts PE, PP</li> <li>Protective caps PE</li> <li>PE films (with max. 5% printed area, also air cushion films)</li> <li>PP straps (black)</li> <li>Packaging made of biodegradable materials</li> <li>Packaging made from renewable raw materials</li> <li>PEE and PP foams are permitted only by exception</li> </ul>	<ul style="list-style-type: none"> <li>Plastic mixtures</li> <li>Rubber compounds</li> <li>Metal-plastic composite films</li> <li>Incompatibly impregnated and VCI plastic films</li> <li>Polyamide straps (green)</li> <li>PS foams</li> </ul>
<b>Metals</b>	<ul style="list-style-type: none"> <li>Steel (also galvanised or lacquered)</li> <li>Aluminium</li> </ul>	<ul style="list-style-type: none"> <li>Tinned metals (e.g. tinplate)</li> </ul>
<b>Wood</b> (e.g. pallets, wooden boxes)	<ul style="list-style-type: none"> <li>Unimpregnated solid wood and plywood</li> <li>Wood wool</li> </ul>	<ul style="list-style-type: none"> <li>Chipboards</li> <li>Coated or lacquered wood</li> <li>Wet wood</li> </ul>
<b>Textiles</b>	<ul style="list-style-type: none"> <li>Cellulose fibre (cotton, sisal, hemp)</li> </ul>	<ul style="list-style-type: none"> <li>Wax cloth</li> </ul>
<b>Glass</b>	Only if absolutely necessary for reasons of chemical compatibility with the product.	<ul style="list-style-type: none"> <li>Fibre glass</li> </ul>
<b>Minerals</b>	<ul style="list-style-type: none"> <li>Dessicant clay</li> <li>Pearlite</li> <li>Silica gel</li> <li>Vermiculite</li> </ul>	<ul style="list-style-type: none"> <li>Not in the form of fibres</li> </ul>



## 6 Transports

### 6.1 International Transports

- For international transports, country-specific packaging regulations must be observed.
- For deliveries from/to non-EU countries, the ISPM 15 regulation must be observed. This includes the (heat) treatment of wooden packaging and the application of the IPPC seal on the packaging, which also indicates the type of treatment.
- IPPC symbol:
  - Country code according to ISO 3166, e.g. DE for Germany,
  - Identifier of the region, e.g. NW for North Rhine-Westphalia,
  - Registration number, uniquely assigned number starting with 49,
  - Treatment method, e.g. HT (heat treatment), MB (methyl bromide), if necessary DB (debarked).<sup>3</sup>



### 6.2 Sea freight

Deliveries by sea freight must be packaged in a seaworthy form appropriate to the material (e.g. wooden crate, foil). Machined metal parts and finished products must be protected against corrosion during transport. For unmachined and pre-machined parts (e.g. cast parts) corrosion protection must also be used.

For deliveries by sea freight, a detailed clarification of the type of packaging with Engel must be completed prior to the first delivery.

### 6.3 Container

If goods are delivered in a container, the fastening of the cargo in the container must be clarified with Engel, unless the goods are Euro Pallets.

### 6.4 Hazardous goods packaging

- Deliveries of hazardous goods must be done in accordance with the regulations of the country of delivery.
- Deliveries/goods must be adequately marked in accordance with the provisions.
- In any case, for the delivery of hazardous goods, additional packaging instructions must be clarified with Engel.

### 6.5 Additional Information

- The use of EA/EMCZ load carriers for other purposes is not permitted.
- Technical data on EA/EMCZ load carriers can be obtained from the contact persons at the plants.

						Page/of 15/15
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