Company 1

Company X. is currently in the process of extending the list of suppliers for welded structures and machined parts (stainless and carbon steel, sheet metal work, milled and turned parts). Mainly we manufacture on customer's demand, so we are looking for flexible suppliers for standard parts as well as customized parts. We are looking for suppliers and future partners. If you wish to be listed as a potential supplier please send your application.

Company 2

<table>
<thead>
<tr>
<th>Description</th>
<th>Entwicklung, Herstellung und Verkauf von hydraulischen Komponenten und kundenspez. Lösungen.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products</td>
<td>electrical equipment/electromechanics-&gt;motors/stators</td>
</tr>
<tr>
<td></td>
<td>drawing parts -&gt; turning-&gt;steel/iron</td>
</tr>
<tr>
<td></td>
<td>drawing parts -&gt; moulding-&gt;light metal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Einfache Permanentmagnetmotoren (DC) für den Antrieb von Zahnradpumpen mit einer Leistung von 200-500Watt. Durchmesser max. 75mm, Länge 135mm inkl. Wellenende</td>
</tr>
<tr>
<td>2) Präzisionsdrehteile teilweise gehärtet und geschliffen nach unseren Zeichnungen Durchmesserbereich von 5-20mm in den verschiedensten Werkstoffen.</td>
</tr>
<tr>
<td>3) Aluminium-Kokillengussteile nach unseren Zeichnungen im Stückgewicht von 0,5-2,5kg Stückgewicht.</td>
</tr>
<tr>
<td>4) Kleine Schmiedeteile aus Vergütungsstahl im Stückgewicht von ca.400gr</td>
</tr>
</tbody>
</table>

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1) common permanent magnet motors for driving gear pumps, from 200 to 500 watt, diameter max. 75mm, length 135mm incl. shaft end

2) precise turned parts, partly tempered and ground according to drawings, diameter from 5 to 20mm, different materials

3) chilled casting for aluminium according to drawings, single weight 0,5–2,5kg

4) small forged parts, quenched and tempered steel, single weight ca. 400g

Lot sizes 100-4000

Wants to discuss Herstellmöglichkeiten, Qualität, Lieferzeiten und Preise.
**Company 3**

ENDDISCS up to a diameter of 1700 mm  
Quality: C22  
forged, machined and finished

DRIVER PLATES up to a diameter of 1700 mm  
Quality: C 22  
finished

MOULDS  
up to a outside diameter of 2000 mm  
length up to 5000 mm  
max.weight: 50 t

Quality:  
SAE - 1020 -C 22 DIN 17200 forged, normally annealed, strengh 412-491 N/mm², according to drawing finished, without components. Roughness height RMS 500 except the grooves on both ends with 250 RMS, parallel 0,1 mm, Work test report according to EN 10204/3.1B, Identification of the chemical analysis, type of heat-treatment and temperature, hardness at 3 points Brinell, US-verification and measure protocol.

**Company 4**

• simple stamping parts (middle tolerances)

• stamping parts (high tolerances , cat sheet thickness)

• precision turning- and milling parts (incl. assembly) form Ø 1,0 – 15,0mm in middle to high quantities

• turning-, milling- and folding parts from Ø 1,0 to 50,0mm

• padlocks after drawing

• sintered parts

• precision casting (material: CuBe2)

• bullets (material 1.4301/05), Ø 1,0 – 5,0mm

• surface refinement on supplied ZAMAK parts  
  Nickel brushfinished, brass polished

• Profiles in Material: Nickelsilver

• Wire in Material: brass (MS58), Ø 3,0 – 3,8mm

• zinc diecasting parts
**Company 5**

plastic electroplating (chromeplating ABS plastic parts)

injection moulding (PE, ABS, PE)

swivel parts / turned parts made of brass or stainless steel

profile extrusion (PE, PVC)

**Company 6**

| Description | The company manufactures customer designed cold formed parts. Alongside our modern Pressing department we offer extensive secondary operations including thread forming, metal cutting and non-cutting operations to offer intricate and complicated parts. Our in-house surface treatment plant offers high quality surface finishes with X-ray control. Continuous improvements in our quality management systems found the basis of our certification to EN ISO 9001 and ISO/TS 16949, of which we are one of the first companies in Germany to achieve. |
| Products | plant engineering  
semi-finished products->belts  
drawing parts->turning  
drawing parts->surface treatment  
drawing parts->joining |
| Product description | english materials:  
- cold heading wire for production of cold-formed parts (f.e. following grades: QSt, 35B2, 19MnB4, 20MnB5, CQ, acc. DIN 1654 or EN 10263, 1.4301, 1.4303, 1.4567, MS63...Diameter 2mm-16mm)  
- wire for nails-production (f. e. diameter 1,19mm, 1.40mm)  
- cold and hot rolled steel stripes in different grades and dimensions  
- circles of different steel-grades acc. to our drawings(f. e.DC01-DC06, DD11-DD14)in very small dimensions (f. e. diameter 18mm, thickness 1,8mm)  
Other:  
- Turning parts as trading parts  
- surface treatment on cold formed parts (f. e. zinc, plastic-coating...) acc. to different automotive standards  
- Heat-treatment on cold formed parts (f. e. hardening, annealing, induction-hardening...)  
Our supplier must have been certificated minimum ISO 9001, better ISO/TS16949 |
| Lot sizes | high volume |
Company 7

Turning-, drilling- and milling parts
Turning-, drilling- and milling parts, based on technical drawings.
Demand per year: 20 to 2500 units
Production batches: 5 to 300 units
Material: Steel, stainless-steel, aluminium
Surface: ready done after description on the technical drawing, normally zinc coated, black oxide finish is also possible.

Welding parts
Big welding parts including machining (attention; high tolerances, for example a flatness 0.3 mm on a length of 3000 mm (latitude 20 mm))
Small welding parts including machining

Assembling
Assembling of complete assembling-groups or of smaller machines. Some of the materials could be provided by Lenhardt, others must be purchased on the regional markets or produced by regional companies (or in the own company).

5 Stück - 300 Stück
I would like to talk to different polish companies, which are able to produce the tree groups which are named.
Furthermore I would like to get information about the technical potentials of this companies, about thinks they do in cooperation, about the economic facts, about references and so on. The companies should not be too big; maximum they should have around about 200 employees. Contacts to purchasing offices (Beschaffungsbüros) are also welcome.

Company 8

Safety footwear

Wood products
- Woodsleeper
- Floorboard for railway

Steelware
- Sheet metal
- sectional steel

Cast parts
- light metal
- aluminium
- iron
- grey cast iron
- Upper building materials
  o Rail attachments
  o Ribbed slabs

Overhead traction line (copper)
Company 9

tooth racks: lengths from 0,5 to 1,2 meters, material specification: 42CrMo4
bolts: diameters from 30 to 170 millimeters, material specification: 42CrMo4, 30CrNi
different drawing parts: the following manufacturing possibilities are necessary:
cutting (Laser, Plasma), bending, mechanical processing, if its possible: surface treatment like KTL, powder coating, FeZn;
further there should exist the possibility of assembling works and also welding.

Company 10

mould constructions and making for presses
steel constructions
grinding
plant construction
mechanical engineering
services for mining
automation
CNC-lathe

Company 11

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The business unit „Packaging Technology“ of the company is expanding its supplier base in Eastern Europe for its special purpose packaging machines. Potential suppliers are capable to produce complexe mechanical parts like:</td>
</tr>
<tr>
<td>• Individual welding- and sheet metal parts</td>
</tr>
<tr>
<td>• Individual turning- and milling parts</td>
</tr>
<tr>
<td>• Individual housing parts</td>
</tr>
<tr>
<td>made of steel, stainless steel and aluminium (with tolerances up to 10 µ) and partly with surface and heat treatment. All parts are ordered in small quantities (1-10 parts per order).</td>
</tr>
<tr>
<td>Moreover we purchase assembly groups like:</td>
</tr>
<tr>
<td>• Assembly groups</td>
</tr>
<tr>
<td>• Basic machines</td>
</tr>
<tr>
<td>in small quantities (1-10 parts per order) on short notice and outstanding quality. We are less interested in suppliers who are in automotive/serial business and see project business only as an add-on.</td>
</tr>
</tbody>
</table>
**Products**

- plant engineering
  - tools->die/mould making
  - drawing parts->sheets
  - drawing parts->turning
  - drawing parts->final assembly
  - drawing parts->milling
  - drawing parts->moulding
  - drawing parts->surface treatment
  - drawing parts -> sheets->separating
  - drawing parts -> sheets->forming
  - drawing parts -> joining->welding
  - drawing parts -> surface treatment->material removal
  - drawing parts -> surface treatment->coating
  - drawing parts -> surface treatment->painting/lacquering
  - drawing parts -> turning->plastics
  - drawing parts -> turning->light metal
  - drawing parts -> turning->steel/iron
  - drawing parts -> milling->plastics
  - drawing parts -> milling->light metal
  - drawing parts -> milling->steel/iron

**Product description**

We are looking for individual part-, assembly group- and basic machine-suppliers.

The complexe drawing parts are out of steel, stainless steel (manufactured not with the same tools/machines of normal steel!!) and aluminium.

Our optimal suppliers already export parts for special purpose machinery industry (like textile machine industry) and have a company size of 30-100 employees. The manufacturing/export of complexe parts in small lot sizes should be familiar. Target could be a supplier development to a assembly group or basic machine supplier.

**Lot sizes**

- 1-20

**Wants to discuss**

We would like to present drawings/sample-parts and discuss about a possible cooperation.

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**Company 12**

Company is looking for partners/suppliers manufacturing their escalator parts (NO elevator parts):

- Machined parts like shafts, chain sprockets, chain sprockets made of casting parts, flywheels, hollow shafts, machined aluminium parts.
- Steelsheet-punching (stamping) und bending parts + surface finish (zinc- and powder coating) + assembled semifinished parts (example: support angle with assembled plastic rollers)
- Aluminium pressure casting parts
- In-Line mixed flow Fans, size 125 mm diameter
- Electric heated pipe-ribbed radiators L= approx. 1000 mm / 1000 Watt
- Plastic pressure casting parts like rollers, covering cap etc..
- Lifting solenoid for service and safety brake
- Complete break systems for drive motor (disc-, shoe- and drum brake)
- Rolled steel profiles (according drawings)
**Company 13**

forging parts (weight: 0.9 to 8kg)
stamping parts
turning parts
heat treatment
rollers for tapered roller bearings
seals (cassette seals and o-rings)

**Company 14**

Integration of the production equipment to the MES layer (Manufacturing Execution System) by using a Framework (proprietary system) based on TIBCO.

The aims are

- High automation in the production line
- Unique user interface for all production equipment types
- Increase of data throughput in the production line
- Reduction of erroneous inputs by a higher level of automation

The tasks which are taken over are:

- Equipment characterization (i.e. requirement specification)
- Detailed specification which describes the architecture, the functions, interfaces, module structure
- Implementation (including module test) on the basis of the framework and customizing; Documentation
- Simulation test
- Integration and System Test on the productive machine
- Rollout of the software to other machines of the same type (on site in the production sites)

**Company 15**

Job order production in small amounts (between 1 and 100 pcs. in the sector of metal (prevalent steel)
Smaller parts also to be manufactured of aluminium or other alloys

Manufacturing capabilities of suppliers:
- welding with or without mechanical aftertreatment (for mechanical treatment in most of the cases a reaming appliance is necessary)
- turning
- milling
- steelworks
- sheet metal forming
For many parts very exact working is necessary (for shaft basis fit or surface roughness)

Some of the required parts are also partial or complete coated (mainly chrome plated, zinc-plated, bronzed,...) and/or hardened

Dimension of welded parts up to 6 meters length

Examples:
Steel girder with welded plates which are machined on a reaming appliance

Frames for extruder made of sheet metal up to 100mm in thickness (thermal cut, plasma cut) which are afterwards machined by a reaming appliance

Steel constructions, e.g. frames, racks, staircase,..

General examples: Flange, spacer, frames, shafts, side plates

**Company 16**

<table>
<thead>
<tr>
<th>Warengruppe</th>
<th>Id.Nr.</th>
<th>Bezeichnung</th>
<th>Kurzbeschreibung</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stahlteile</td>
<td>254941</td>
<td>upper cap D=450 St</td>
<td>Bearbeitete Stahlkappen und Flansche nach Spezifikation / Zeichnung</td>
</tr>
<tr>
<td></td>
<td>254949</td>
<td>upper cap D=550 St</td>
<td>Finished steel covers and flanges according to our requirements / drawings</td>
</tr>
<tr>
<td></td>
<td>59046</td>
<td>circular blank 10 x</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>210 ST</td>
<td></td>
</tr>
<tr>
<td></td>
<td>168661</td>
<td>flange plate D=210x12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>252959</td>
<td>44,5 flange ring 210 x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>268500</td>
<td>flange plate D=260</td>
<td></td>
</tr>
<tr>
<td></td>
<td>268501</td>
<td>ST</td>
<td></td>
</tr>
<tr>
<td></td>
<td>267223</td>
<td>flange ring 430 ST</td>
<td></td>
</tr>
<tr>
<td>Drehteile</td>
<td>266992</td>
<td>fitting G3/8 CUZN</td>
<td>Drehteile aus Messing / Stahl nach Spezifikation / Zeichnung teilweise als Baugruppe</td>
</tr>
<tr>
<td>Turned brass and steel parts</td>
<td>268025</td>
<td>fitting G 1 1/4</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>----------------</td>
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<tr>
<td>254448</td>
<td>RV-bushing CuZn fitting G 1 1/4</td>
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<tr>
<td>14782</td>
<td>fitting G 1/2 &quot;</td>
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<td></td>
</tr>
<tr>
<td>163378</td>
<td>shoulder bolt CuZn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>256832</td>
<td>fitting M 14 x 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assembly groups</td>
<td>155978</td>
<td>T-fitting</td>
<td></td>
</tr>
<tr>
<td>158868</td>
<td>ball valve</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schwingungsdämpfer für Wärme- pumpe</td>
<td>54901</td>
<td>damper 30 x 40 / 40 SH</td>
<td></td>
</tr>
<tr>
<td>Damper for heat pump</td>
<td>168813</td>
<td>damper 20,5 x 50 / 60 SH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>169443</td>
<td>damper 40 x 40 / 60 SH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>254853</td>
<td>damper 30 x 50 / 45 SH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>254854</td>
<td>damper 30 x 50 / 60 SH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>254855</td>
<td>damper 30 x 30 / 45 SH</td>
<td></td>
</tr>
<tr>
<td>Klebeblenden</td>
<td>254308</td>
<td>front sticker DHE</td>
<td></td>
</tr>
<tr>
<td>Front stickers</td>
<td>254309</td>
<td>front sticker DEL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>270494</td>
<td>front sticker SNU 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>277435</td>
<td>front sticker SNU 5</td>
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<tr>
<td></td>
<td>277436</td>
<td>front sticker SN</td>
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<tr>
<td></td>
<td>248780</td>
<td>front sticker SHZ</td>
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<tr>
<td>Elektronische Bauteile</td>
<td>256186</td>
<td>conductor board DHE 3</td>
<td></td>
</tr>
<tr>
<td>Electronic components</td>
<td>247513</td>
<td>transformer 400/9 2,2VA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>165601</td>
<td>potentiometer 10k 125 Grd.C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>240738</td>
<td>transformer 230/ 9 2,8 VA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>275324</td>
<td>conductor board setpoint device with wireless module</td>
<td></td>
</tr>
<tr>
<td></td>
<td>270494</td>
<td>Schwingungsdämpfer für Wärmepumpen gemäß Spezifikation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>168813</td>
<td>Damper for heating pumps according to our requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>254853</td>
<td>PC-Folie bedruckt im Siebdruckverfahren, gestanzt u. mit Kleber ausgerüstet teilweise mit geprägten oder aufgebrachten Tasten nach Spezifikation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>270494</td>
<td>PC-foil printed with screen printing, punched and laminated with glue on the back side partly with embossed or printed buttons according to our requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>256186</td>
<td>Elektronische Bauteile nach Spezifikation/ Zeichnung</td>
<td></td>
</tr>
<tr>
<td></td>
<td>247513</td>
<td>Electronic components according to our requirements</td>
<td></td>
</tr>
</tbody>
</table>
**Company 17**

Gußteile aus GGG und GTS, 0.3 bis 3 kg casting parts made of GGG and GTS from 0.3 up to 3 kg weight  
Schmiedeteile aus CK, ST, von 0.3 bis 5 kg, Gesenkschmieden  
Forging parts made of CK, carbon steel from 0.3 up to 3 kg weight, die forged Stanz und Biegeteile,  
Stamping and bending parts of carbon steel Laserteile bis ca. 50 kg, Blechstärken ab 3 mm bis ca. 20 mm aus St 35, St44...  
laser cutted steel parts up to 50 kg, sheet thickness from 3 to 20 mm carbon steel St 35, ST 44, S235  
Schweiß/Stanzkonstruktionen bis 400 kg  
Welded and stamped parts up to 400 kg  
Oberflächen: Feuerverzinken, Galvanisch Verzinken, Lackieren, Pulverbeschichten  
Surfaces: hot dip galvanized, galvanized, painted and powder painted  
Sperrholz: Birken/Pappelsperrholz plywood: birch and some poplar too  
Kunststoff-Spritzgussteile bis 0.5 kg  
plastic parts up to 0.5 kg  
Schnittholz aus Fichte spruce (fir) sawn wood  
Anlagenbauer für Spezialanlagen machines and plants for metal and wood production  
Spanplatten (roh, beschichtet) chipboards raw and surfaced  
Service like montage and carpenters products  

Suppliers should be certified DIN/ISO, they should have at least 100 employees, experience in export and shure in English or German.

**Company 18**

steel construction  
Heavy, middle-sized steel construction like steel halls for industrial use, stages, platforms, podiums, stairs including engineering and assembling (mounting) + Montage  
mechanical manufacturing according to drawings tank/container construction  
pipeline constructions, assembling/mounting of pipelines

**Company 19**

Gußteile aus GG20 und GGG40  
Gußbearbeitungen  
Zahnräder  
Kegelradsätze  
Ritzelwellen  
Event. Elektromotore
**Company 20**

1.) **precise steel structure**
   
   up to 200 kg, diameter 1,400 x 1,000 mm, material ST52
   in different versions with 150 pieces per year each
   (torch cutting, welding, mechanical treatment with close tolerances)
   (e.g. stands for quick change systems -> see homepage)

2.) **forged parts**
   
   up to 8 kg per piece, quantity per year from 100 to 5,000 pieces
   materials: St52-3, CK45, 42CrMo4V, X45NiCrMo4G (1.2767)
   Free forming: Bars with cross section of 160 x 130 to 260 x 240 mm - pre-milled;
   Materials: St52-3, CK45

3.) **small + medium turned parts**
   
   diameter from 5 to 20 mm and up to 300 mm diameter and up to 700 mm length,
   annual requirements in each case 100 to 5,000 pieces
   materials: St52-3, CK45, 42CrMo4V, GG25, aluminum...)
   (e.g. valve components, piston, guiding pieces for hydraulic cylinders)

4.) **drilled / milled parts**
   
   cross section up to approx. 200 x 200 mm with 200 to 500 mm of length annual
   requirements in each case 100 to 2,000 pieces
   materials: St 52-3, CK 45, 42CrMo4V, aluminum...)
   (e.g. bottom parts and valve housings for hydraulic cylinders)

**NOTE:** form and position tolerances as well as roughness depths must correspond to the requirements of construction units for oil hydraulics!