



GLC GRUPO LAUCO

Building Technology
more than 30 years giving solutions



- ⚙️ Lauco is an enterprise group dedicated to industrial engineering and development of projects that arise from the strategic union of Comanai and Launik in 2007.
- ⚙️ We have more than 30 years of experience in the next industries.



Automotive Parts



White Line



Wind Energy & Solar



Alimentary



⚙️ We have 85 employees in the world.

⚙️ Our employees has high level experience according with the projects that we made during this time in all industries.

⚙️ We have done some development projects including R & D

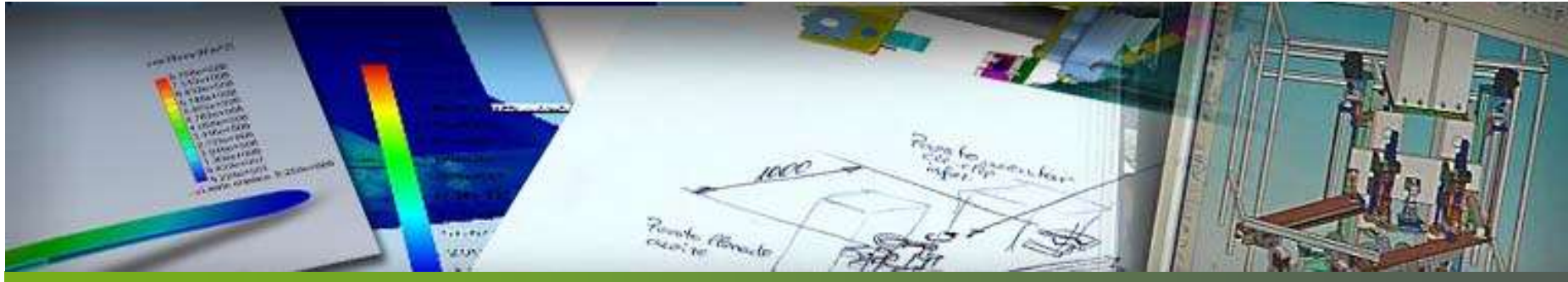


All projects that we made in Lauco Group are performed competently with the following focus areas :

- ⊗ Consultancy and Quotations
- ⊗ 3D Design Process (SolidWorks & Solid Edge)
- ⊗ Mechanic systems, pneumatic components, Hydraulic components, measure transducers and electro-mechanic devices.
- ⊗ PLC Programming, Robot & Traceability Software
- ⊗ PC Programming
- ⊗ Commissioning in the customer.
- ⊗ TSD (Requested by the customer and additional service)

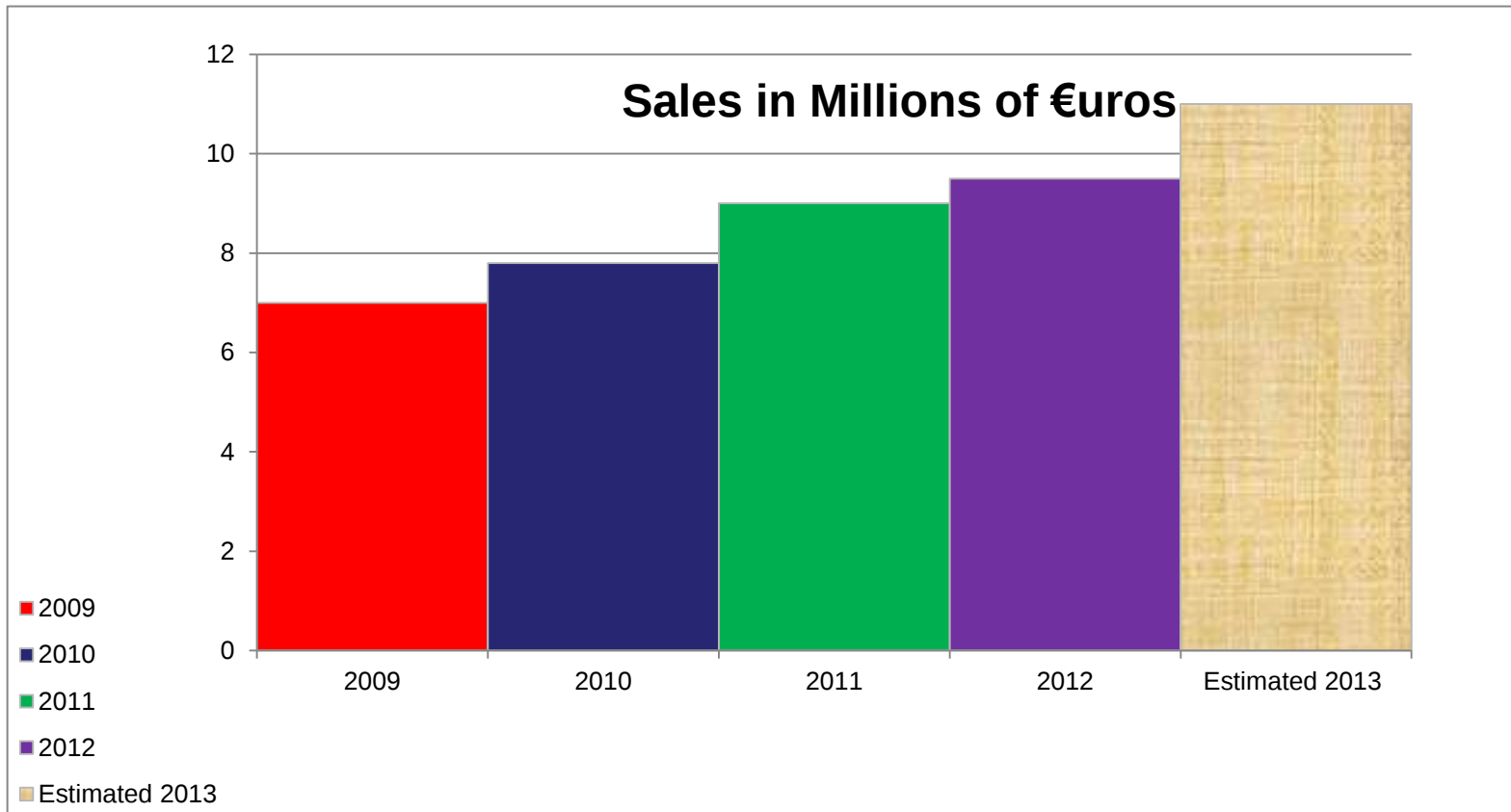
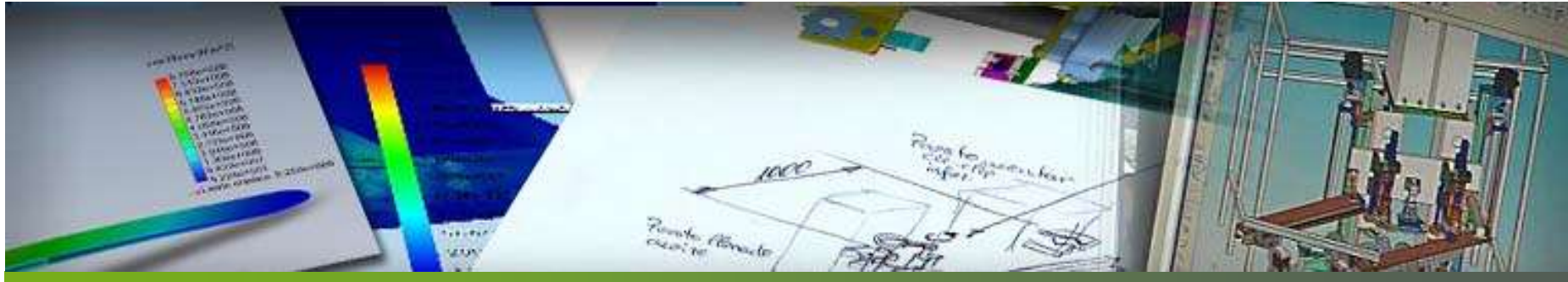


- ⚙ The technical support is created according the customer requirements.
- Free Phone Contact during labour year in our facilities.
 - Net conections with the line or machine cabinet.
 - Customer personal TSD, assistance, with customer agreement if was required.



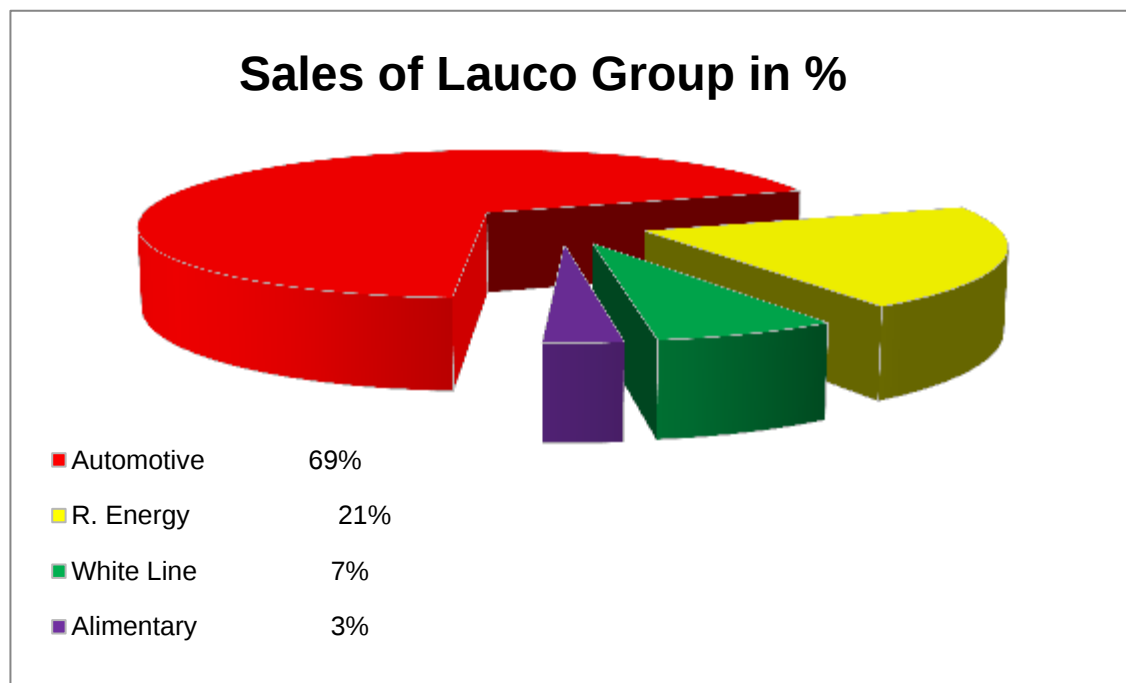
- ⚙️ Lauco Group is located in the north of Spain.
- ⚙️ Our suppliers are located within a radius of 70 Km.
- ⚙️ The nearest international airport is located in Bilbao





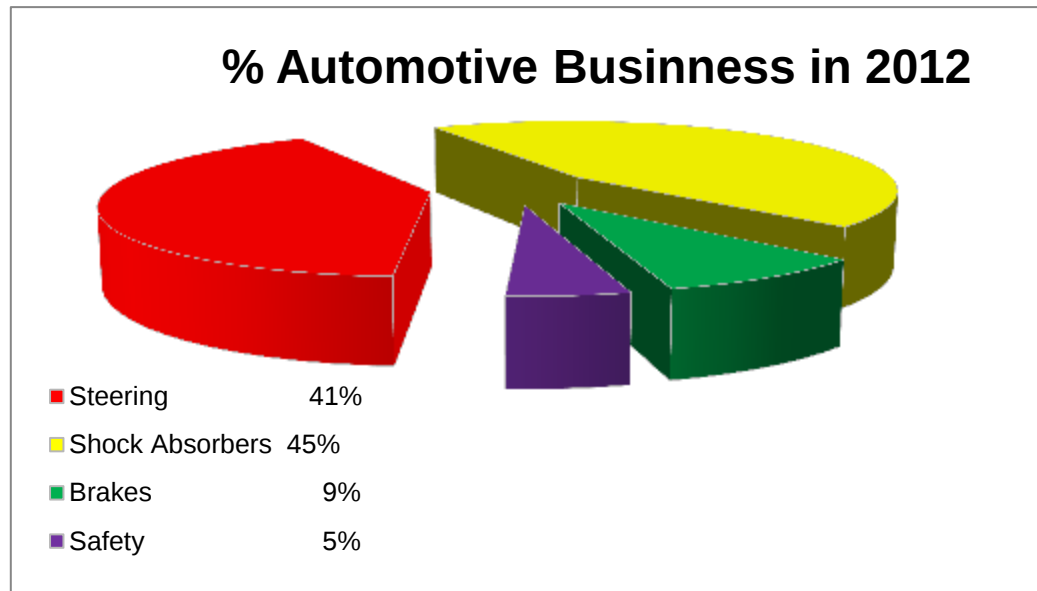


⚙ Sales structured in the next business areas during last 2012;





⚙ Sales structured in the next business areas during last 2012;





Our branches:

SPAIN

Launik Máquinas Especiales S.L.

Poligono Galarza, nº16.
Tel.: +34 94 616 90 10
Fax.: +34 94 616 77 66
48277 Etxebarria (Bizkaia)
Email: launik@launik.com

Comanai S.L.

Pol. Industrial Iperategui, 1. nº22
Tel.: +34 948 34 36 16
Fax: +34 948 34 36 17
31160 Orkoien (Navarra)
Email: comanai@comanai.com

3F Engineering

C/ Irunlarrea, 61 1 A y B
31008 Pamplona (Navarra)
Tfno: 948 19 80 51
Fax: 948 19 82 15
Email: 3fengineering@grupolauco.com

GLC Electric

Pol. Industrial Iperategui, 1. nº22
Tel.: +34 948 34 36 16
31160 Pamplona (Navarra)
Email: glcelectric@grupolauco.com





Sales Offices in Europe:

EUROPA

DEUTSCHLAND

GLC - Deutschland

Dr. -ING. Luis Carazo
Windischernstr. 16
D-99523 Weimar
Phone: +49 - (0) 3643 850 007
Mobittel: +49 (0) 171 5254 083
Fax: +49 - (0) 3643 776 900
Email: cortin@t-online.de

CZECH REPUBLIC

GLC Česká Republika

Jan Smutny
Phone: +42 07 77 98 96 31
Email: glccz@grupolauco.com





Main Partner in Germany:

EUROPA



Retrofit-Verbund (Deutschland)

c/o Record-Maschinenbau GmbH
Werkstrasse 5
D-07426 Königsee
info@retrofit-verbund.de

Tel: +49 (0) 367 38 646 41
PC-Fax: +41 (0) 62 844 02 65

Retrofit-Verbund AG

Diessenhoferstrasse 14A
CH-8252 Schlatt / TG
info@retrofit-verbund.ch

Tel: +41 (0) 62 844 02 55
PC-Fax: +41 (0) 62 844 02 65





Our Sales Offices:

EUROPE

TURKEY

TROYA IC VE DIS TIC.LTD.STI.

K.Bakkalkoy, Ataturk Cad.
Orkide Sk.Karanfil Ap. No: 7/3
34750 Atasehir-Istanbul-Turkey
Phone: +90216 5774163
Mobittel: +90532 3146749
Fax: +90216 5774164

ASIA

CHINA

RIECKERMANN

Mr. Rao Zhang Lin
Room 211-215 Hui Tai Building
430 Xu Jia Hui Road
Shanghai China
PostCode; 200025
Phone; +862164728743

SOUTH AMERICA

BRAZIL

RST EXPORT – IMPORT LTDA.

Roberto Cunha
Av. Brig. Faria Lima, 1811 – CJ
01476 – 913 Sao Paulo
Phone: (55 11) 3814 7695
Fax: (55 11) 3814 6095
Email: rsti@uol.com.br



Our Main partner in Asia:

Asia



Rieckermann GmbH

Mönckebergstraße 10

20095 Hamburg

Germany

Phone: + 49 (0) 40 / 320 20 - 0

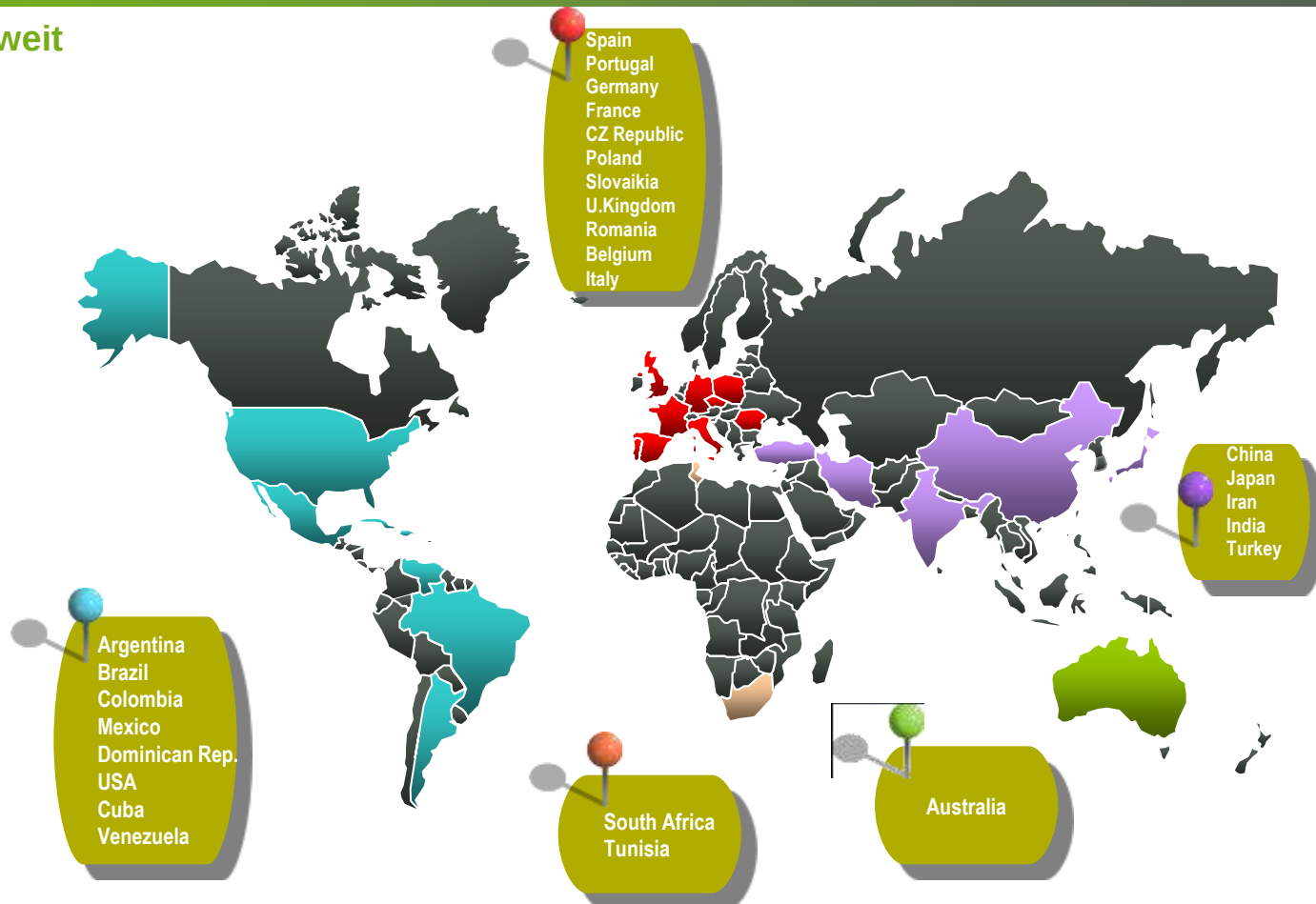
Fax: + 49 (0) 40 / 320 20 - 200

Email: info@rieckermann.com





Anlagen Weltweit



Our main Customers



Hauptkunden



DELPHI

KYB
Shock Absorbers

HYUNDAI
MOBIS



AL-KO

AMORTISSEURS
RECORD
Made in FRANCE

TRW

GKN
GKN Driveline



CIE Automotive

CSA

سيال
AMORTISSEURS
Société Industrielle d'Amortisseurs

TENNECO

KONI

**MAGNETI
MARELLI**

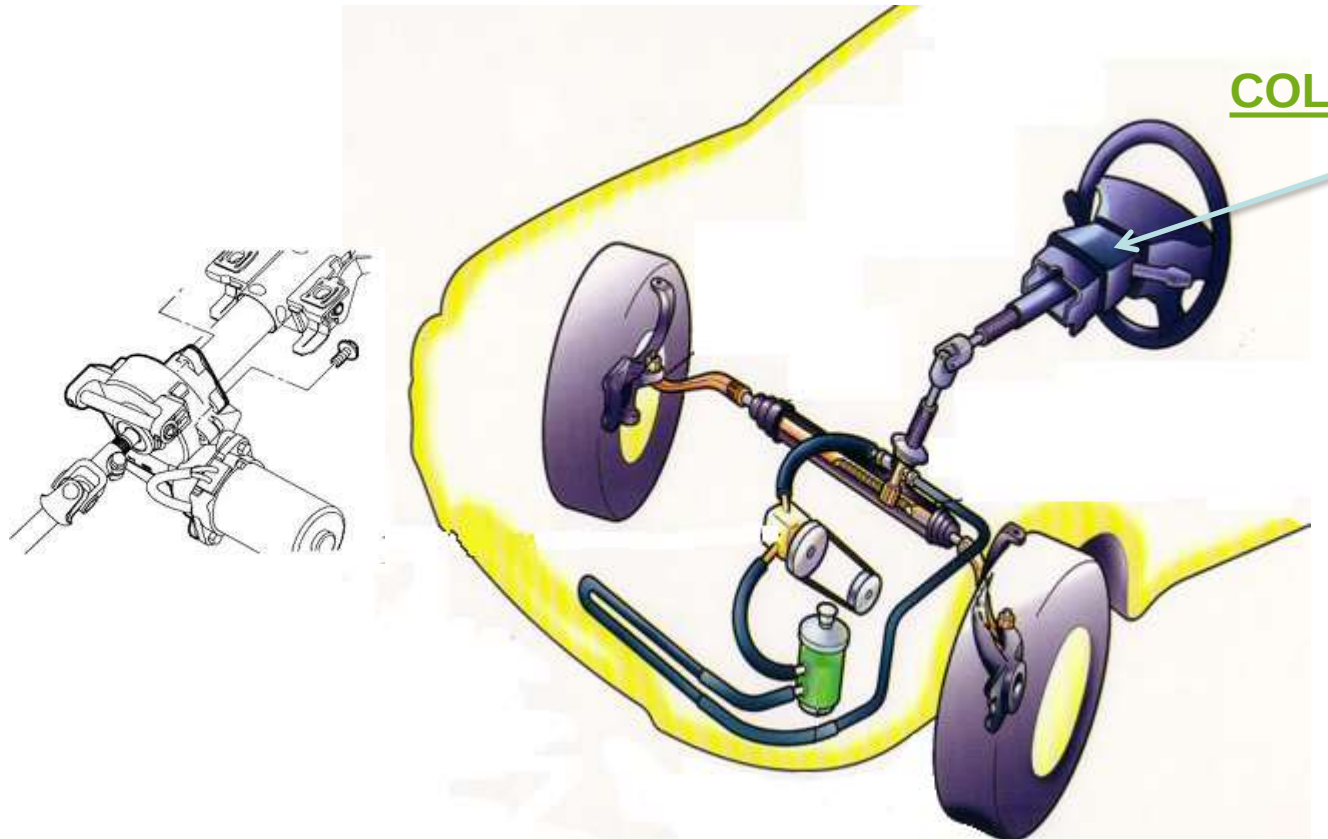
Steering Business

Our Steering experience;



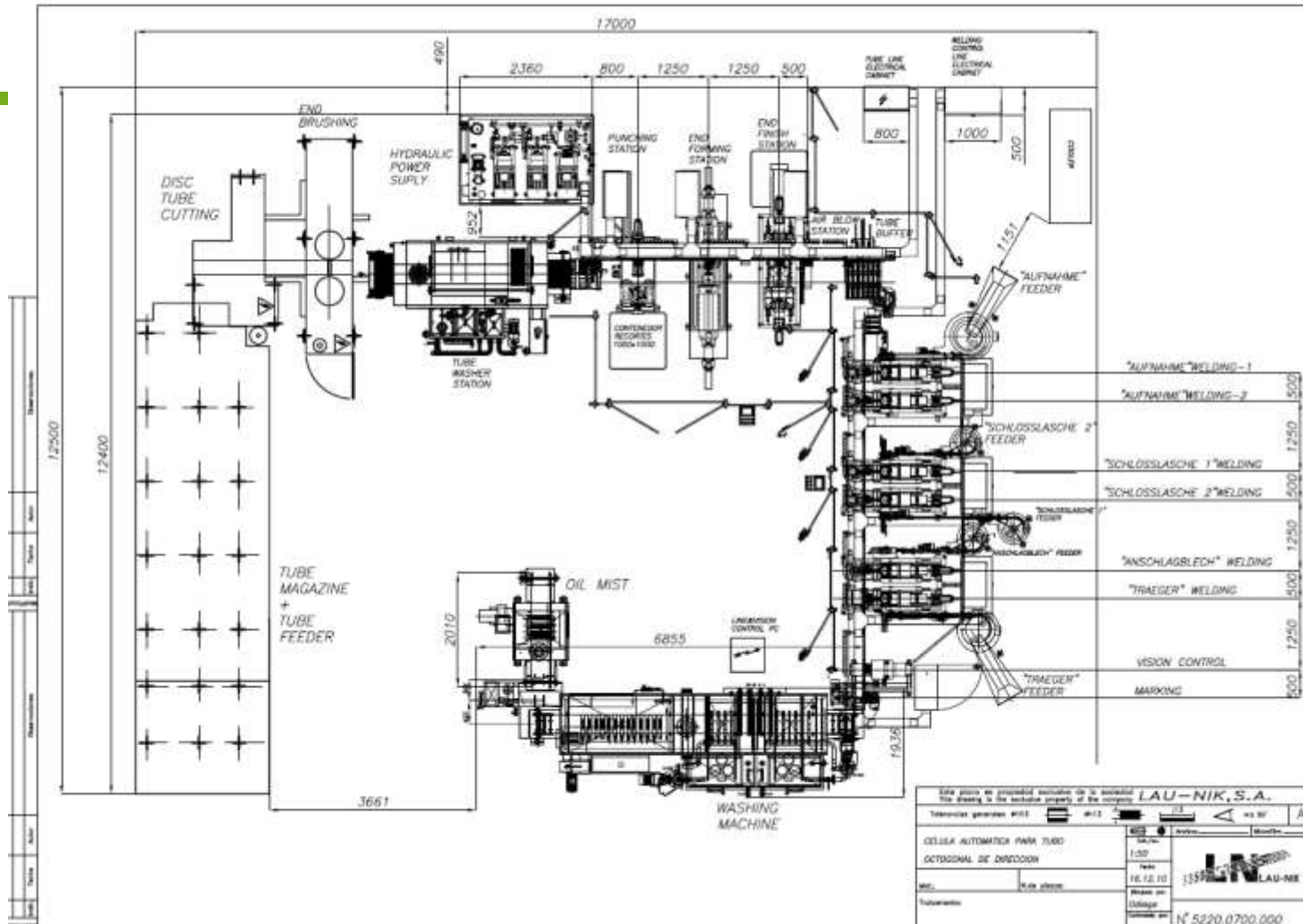


Our Experience

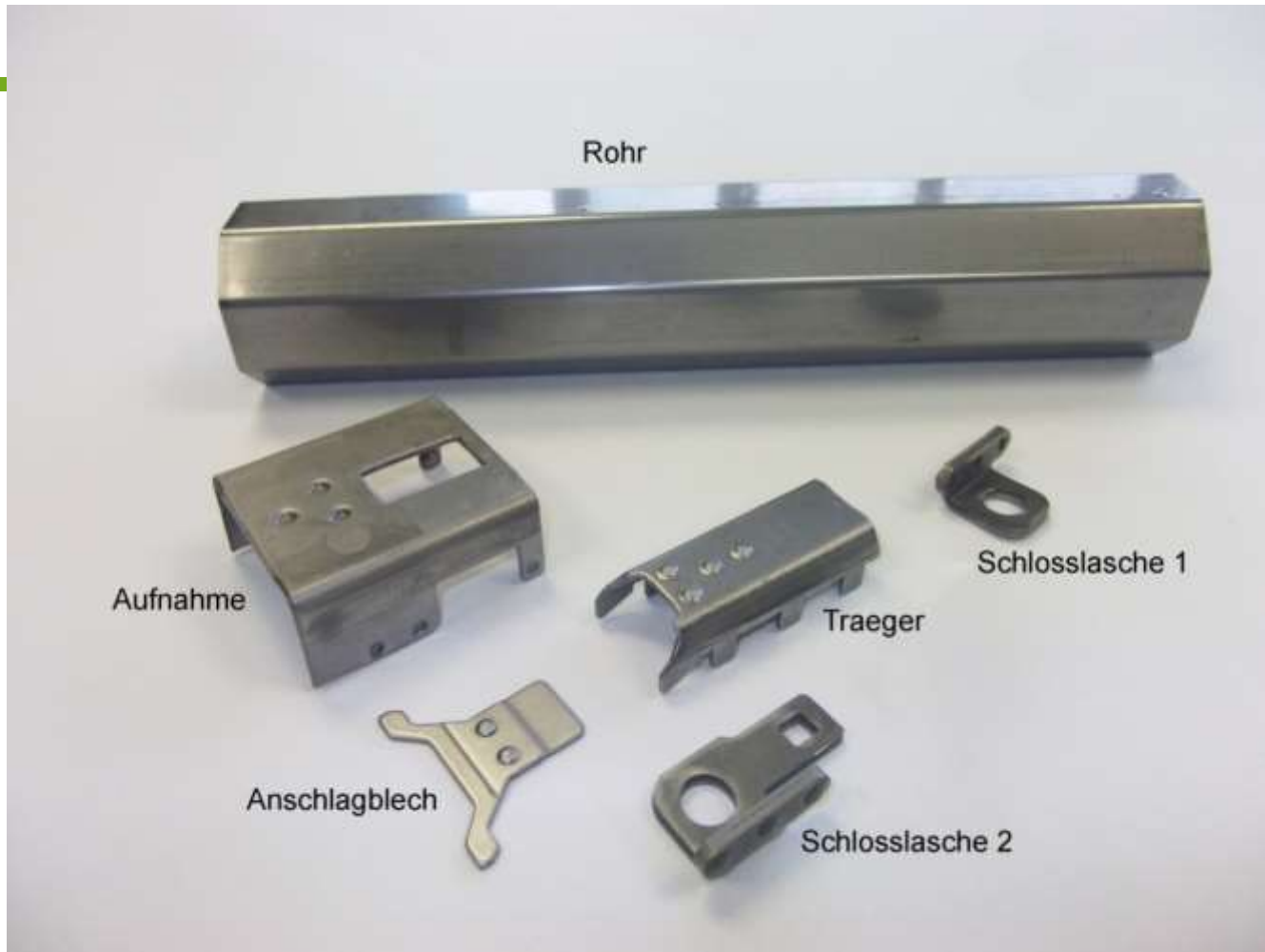


COLUMN ASSEMBLY LINES
AND MACHINES

Column Tube Machining and Welding Line



- Steering Column Tube Machining and Welding Line;



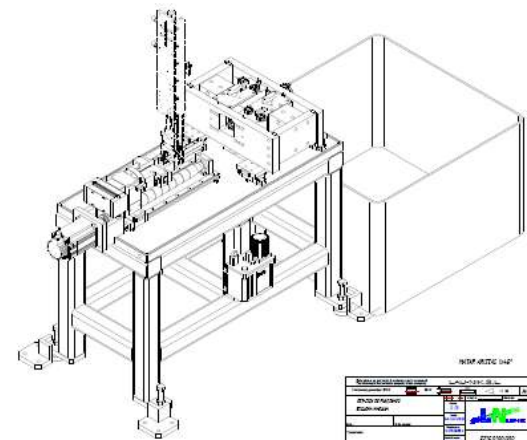
- Steering Column Tube Machining and Welding Line;
-



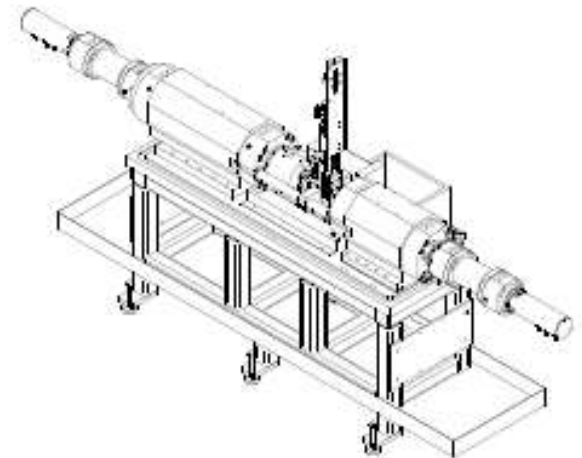
- Steering Column Tube Machining and Welding Line;



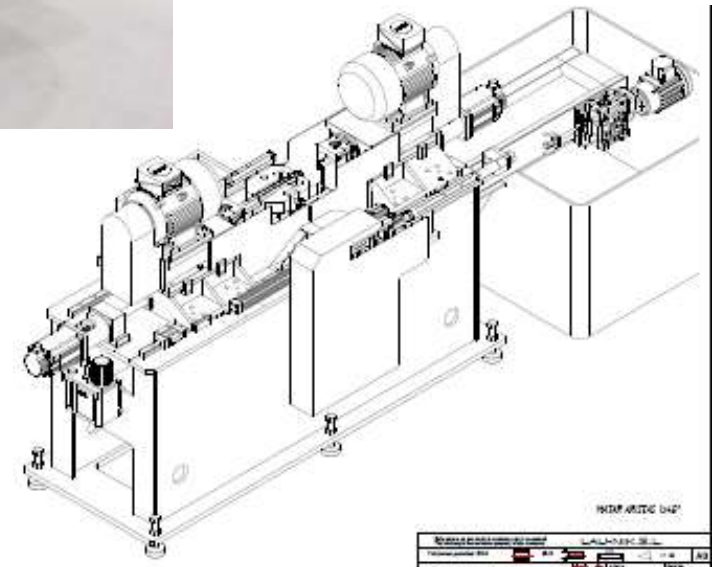
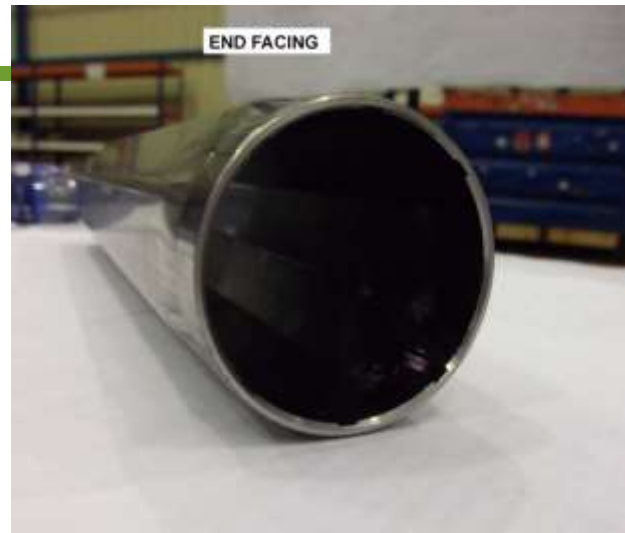
- Steering Column Tube Machining and Welding Line;



- Steering Column Tube Machining and Welding Line;

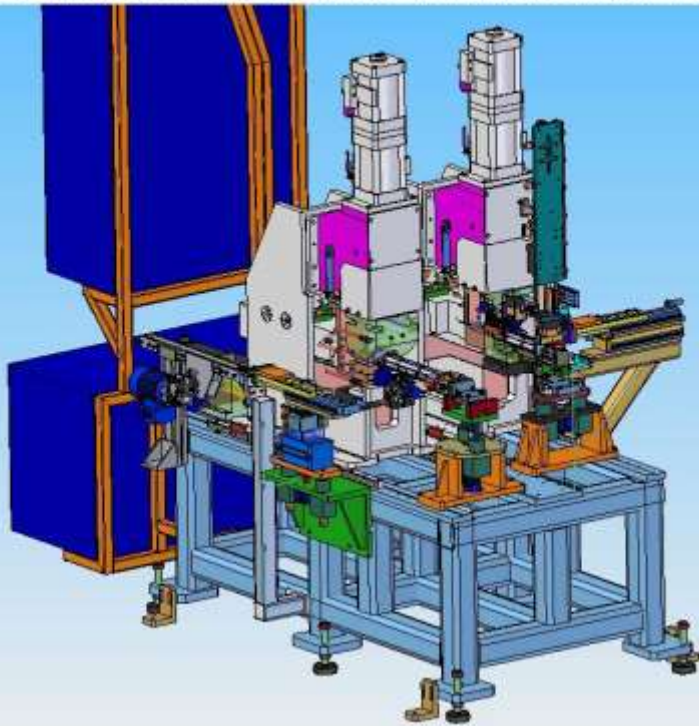


- Steering Column Tube Machining and Welding Line;



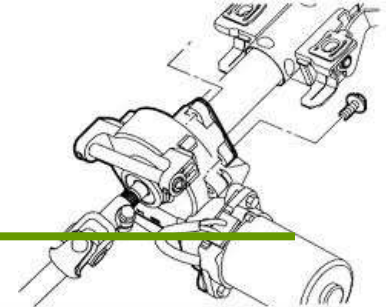
- Steering Column Tube Machining and Welding Line;

SOLDADORA 3 ANSCHLANGBLECH Y TRAGER
ANSCHLANGBLECH AND TRAGER WELDING MACHINE



Column Assembly Line

STEERING BUSINESS



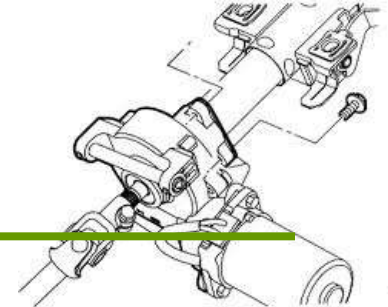
• Mechanical Automatic Column Assembly Line



FIAT Steering Column Assembly Line in palletized concept :

- Steering Column Assembly and Test, controlling all parameters
- 4-5 Operators according the Left hand or Right Hand model.
- Cycle Time: 38 seconds /each part.
- Installed in Europe and Mexico

STEERING BUSINESS



• Mechanical Semi Automatic Column Assembly Line

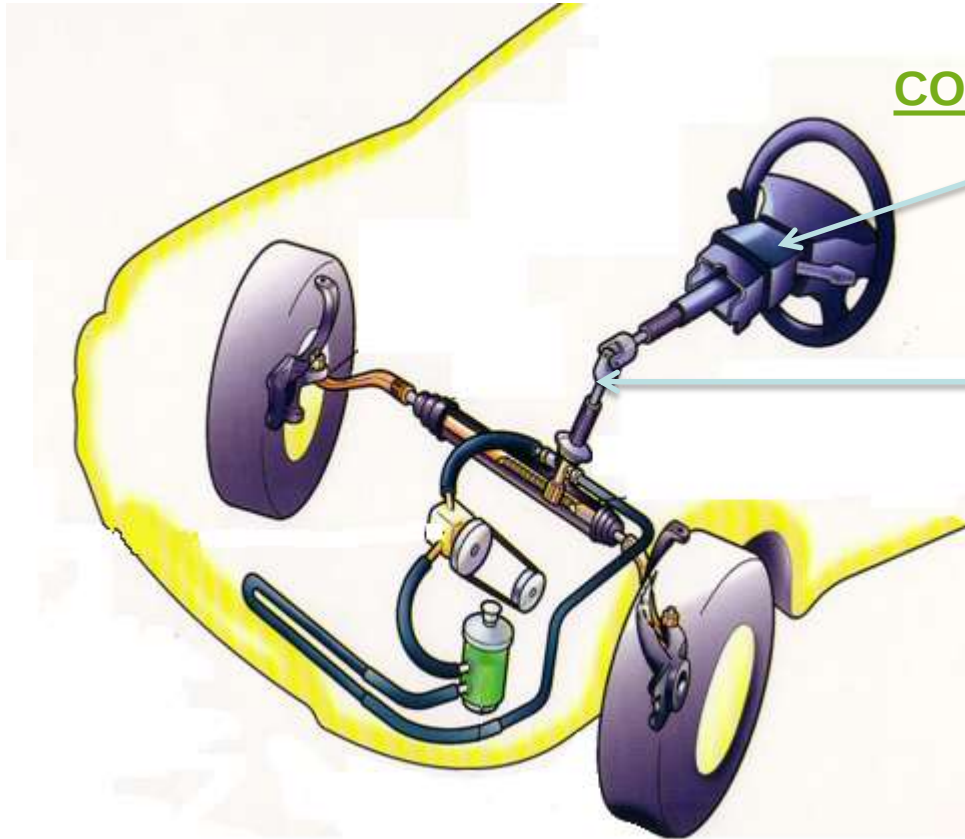
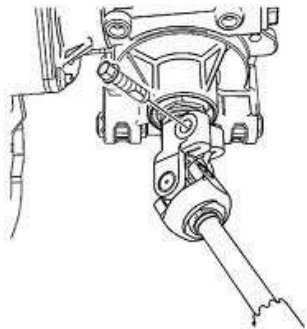


- ⚙️ FIAT Steering Column Assembly Line in palletized concept :
 - Steering Column Assembly and Test, controlling all parameters
 - 4 Operators according the Left hand or Right Hand model.
 - Cycle Time: 80 seconds /each part.
 - Installed in Mexico

I-Shaft



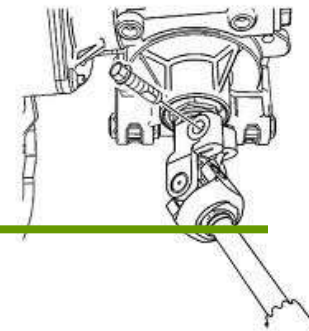
Our Experience



COLUMN ASSEMBLY LINES
AND MACHINES

SHAFT MACHINES
AND ASSEMBLY

STEERING BUSINESS



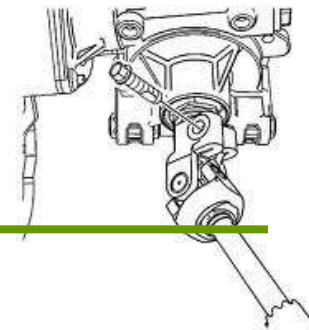
• Servo Controlled Assembly, Machining and Crimping



Steering Column I-Shaft Assembly Machine :

- I-Shaft Fork assembly, machining and measurement process.
- 1 Operator.
- Cycle Time: 30 seconds /each part.
- Installed in Europe

STEERING BUSINESS



• Semi Automatic Universal Joint Assembly Machine

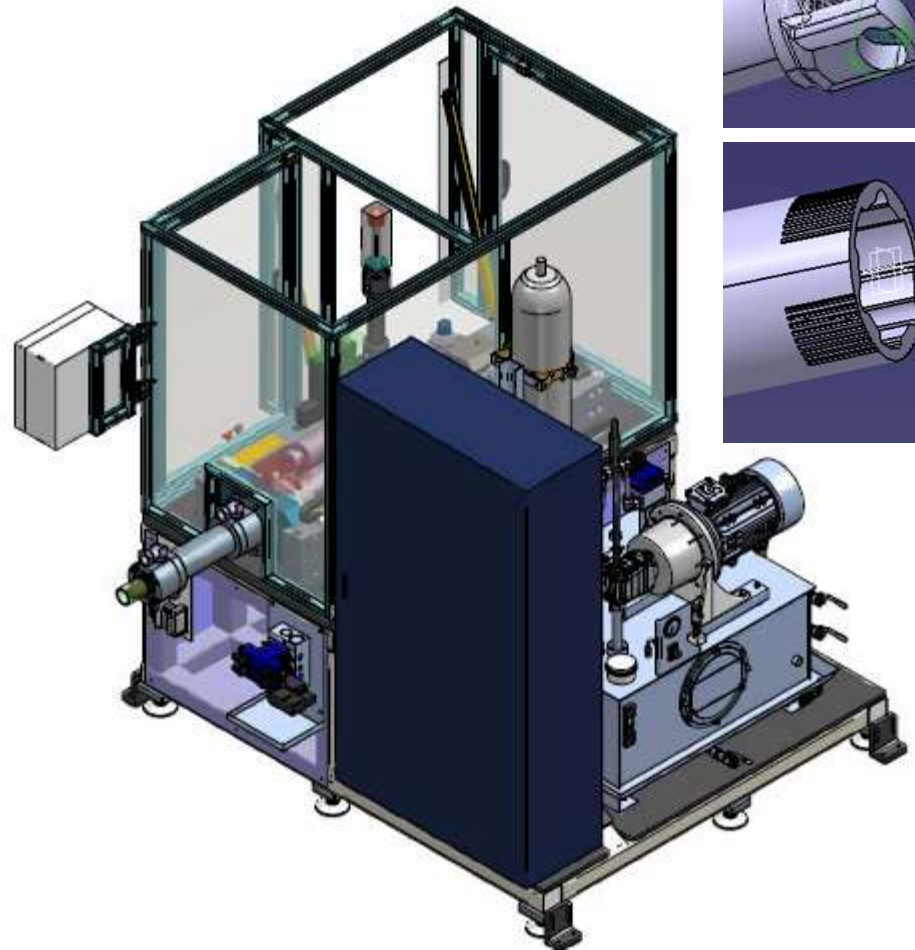
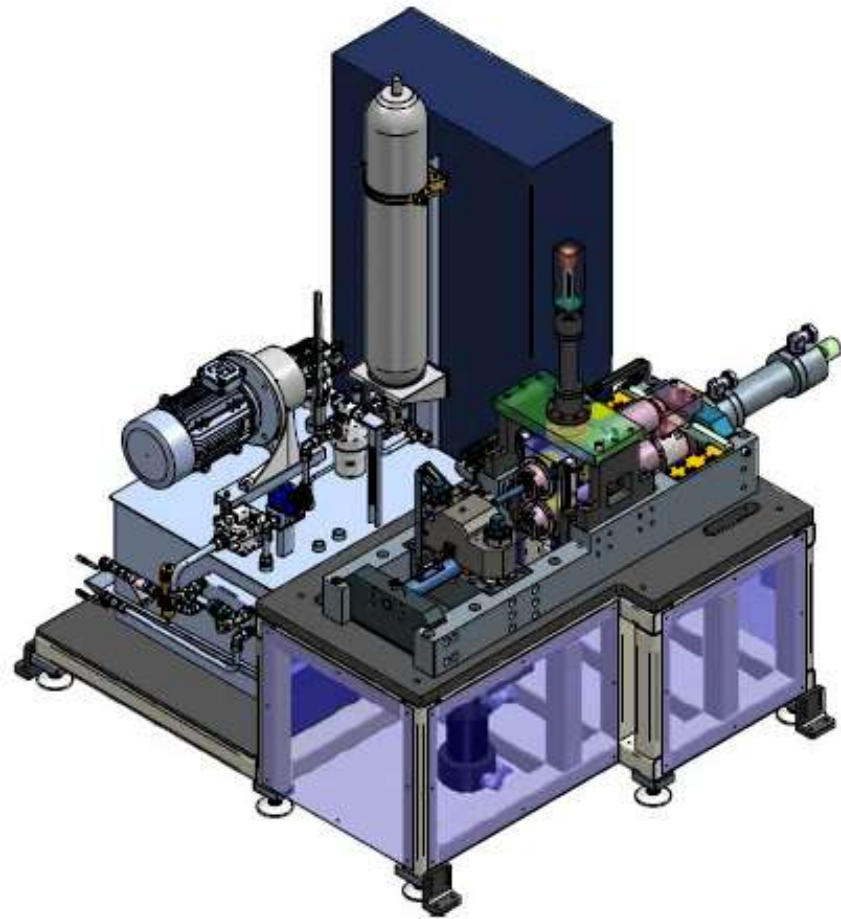


I-Shaft Standard fork Assembly process :

- Fork, cross and bearing assembly
- 1 or 2 Operators according the cycle time.
- Cycle Time: 15 seconds /each part (2 operators)
- Installed in Europe,Mexico and China

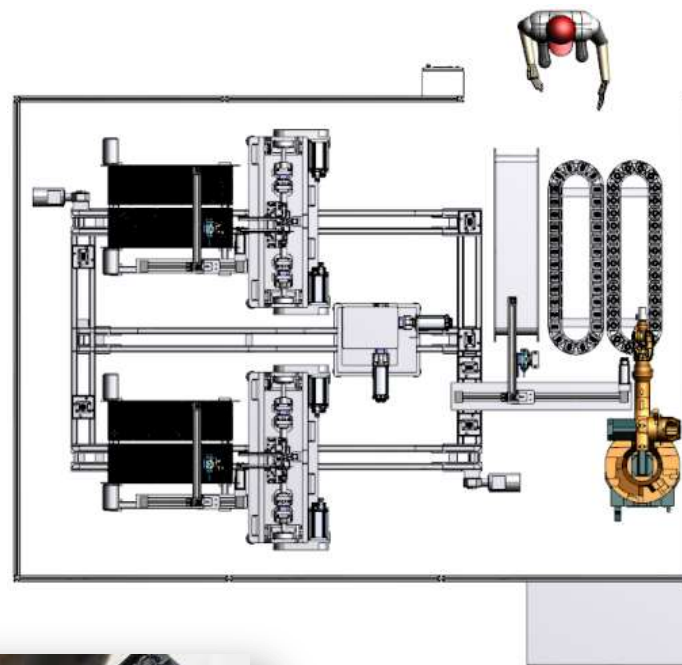
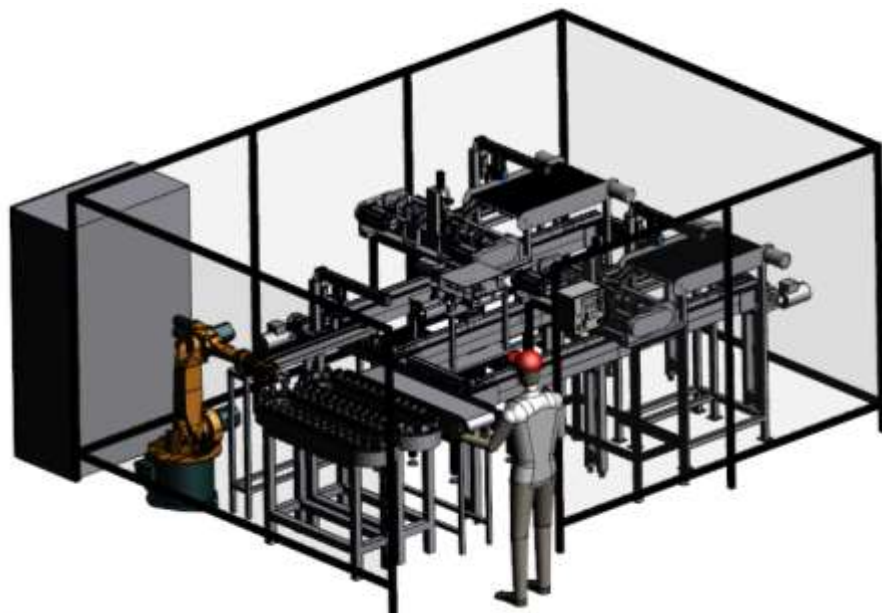
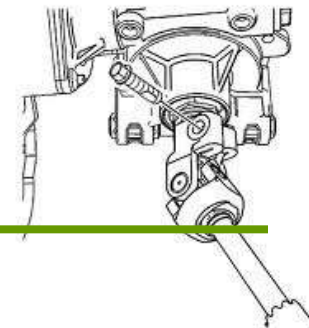
STEERING BUSINESS

- I-Shaft Broaching and Crimping Shaft Machine



STEERING BUSINESS

Automatic Palletized Universal Joint Assembly Line

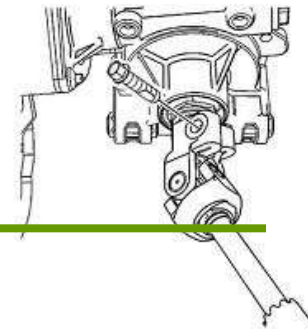


I-Smart Automatic Concept Assembly Line :

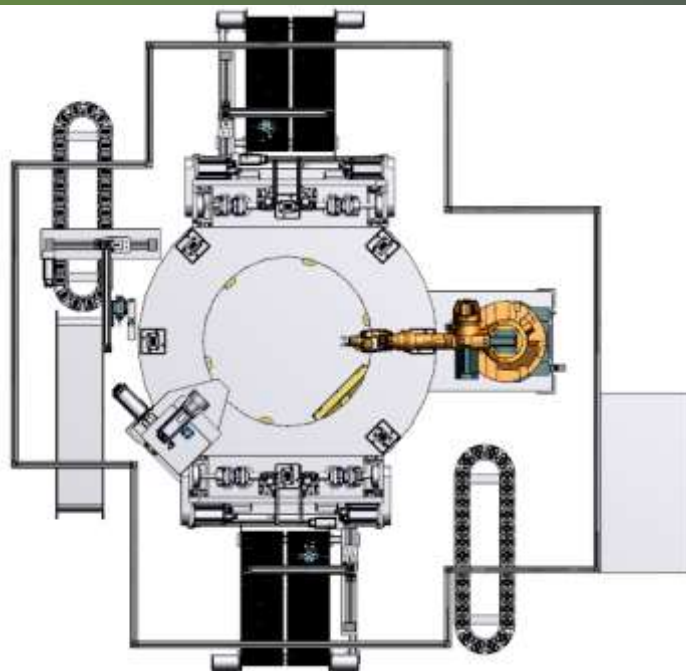
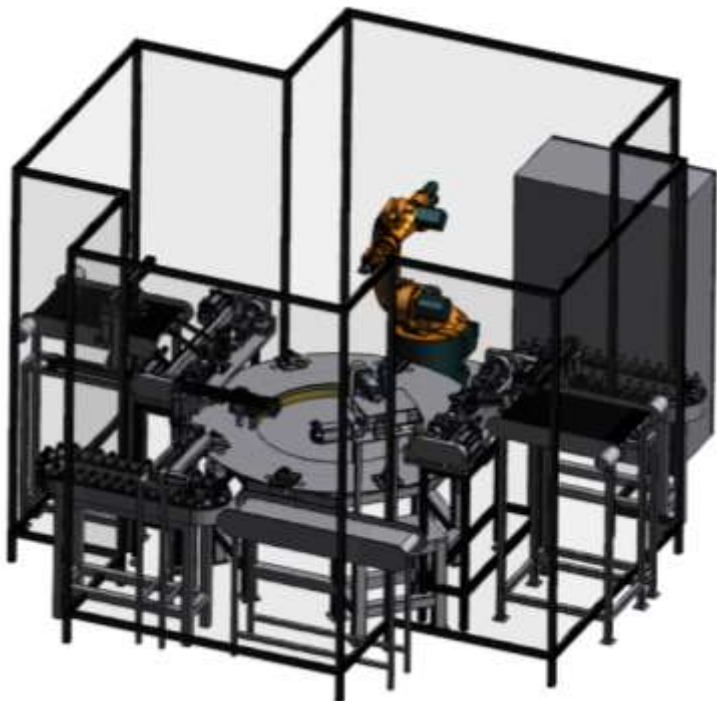
- Fork, cross and bearing assembly in palletized transfer.
- 1 or 2 Operators according the cycle time.
- Cycle Time: 30 seconds /each part
- Installed in Europe,Mexico and China



STEERING BUSINESS



Automatic Rotary Indexer Universal Joint Assembly Machine



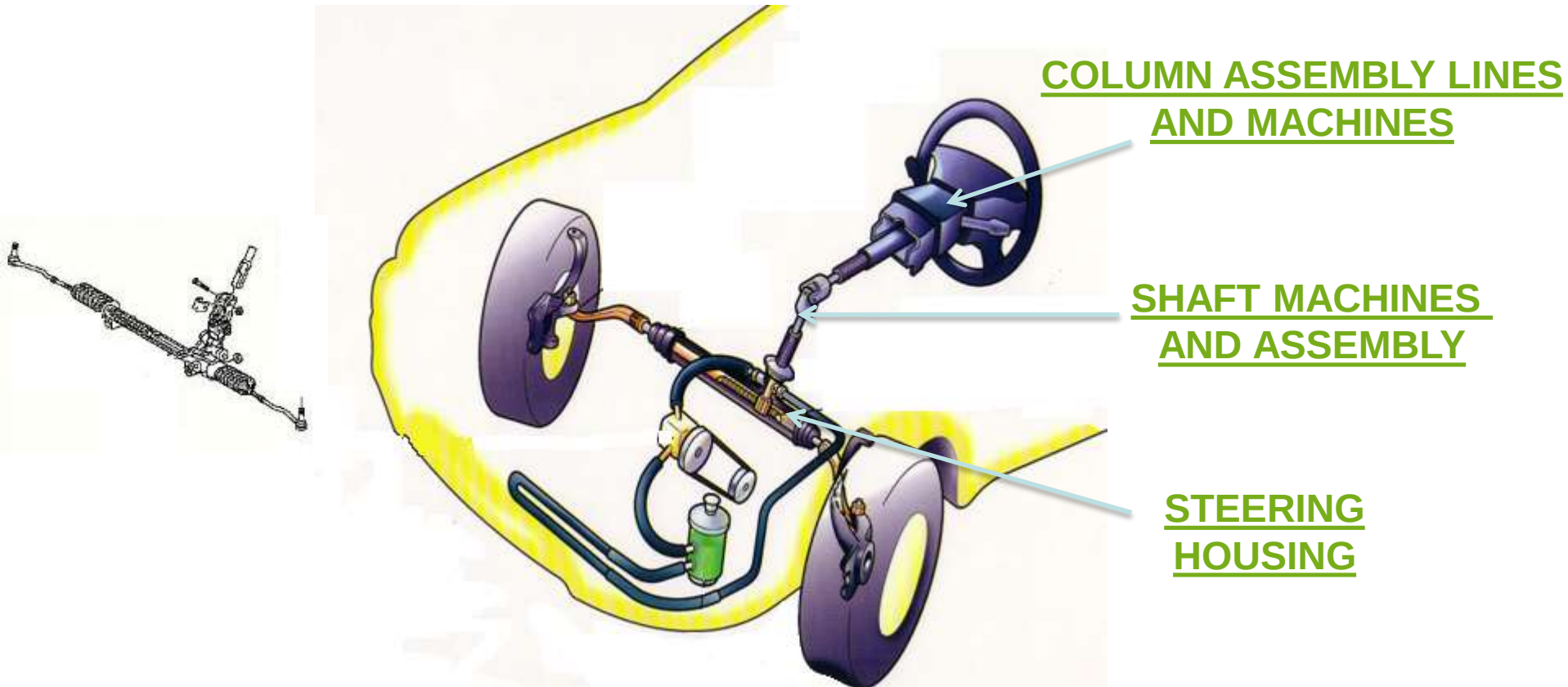
- I-Shaft Automatic Concept Assembly Line :
- Fork, cross and bearing assembly in palletized transfer.
- 1 or 2 Operators according the cycle time.
- Cycle Time: 30 seconds /each part
- Installed in Europe,Mexico and China



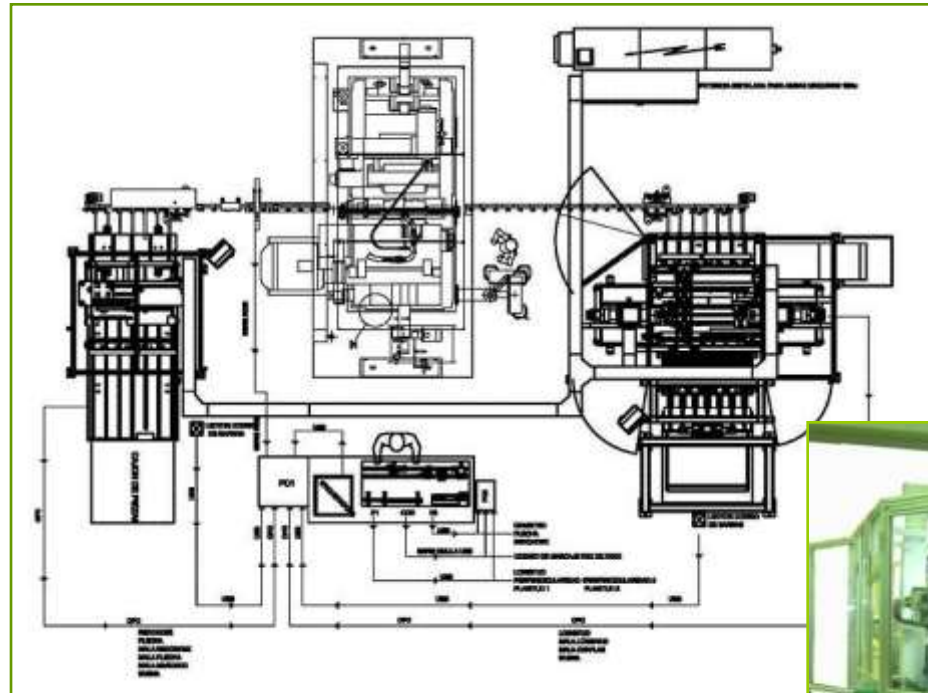
Housing Assembly



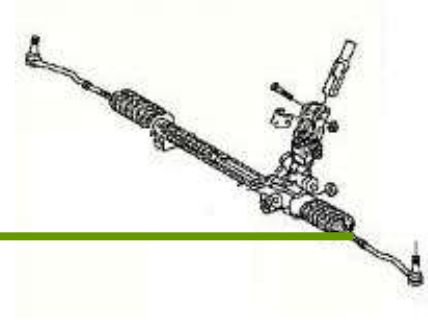
Our Experience



• RBN Rack Machining Process



PROYECTOS RACK BALLNUT



- **RBN Nut Milling full Automatic Robotized Cell**



- **“Rack Ball Nut” Steering Milling Robotized Cell :**

- RBN Ball Nut machining process
- Nut Boxes feeds by palletized line.
- Cycle Time: 20 seconds /each part.
- Installed in Europe

STEERING BUSINESS



• RBN Rack Broaching Automatic Robotized Machine and Screw Test



“Rack Ball Nut” Broaching Robotized Cell :

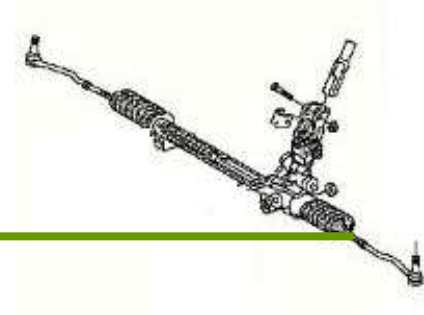
- RBN Rack machining process, cleaning and test
- Racks feeds automatically by Pick and place.
- Cycle Time: 20 seconds /each part.
- Installed in Europe

STEERING BUSINESS

- HPS Assembly Double Line



STEERING BUSINESS



• HPS Assembly Double Line



Main Details:

- Two Models
- Cycle Time 40 sec. (first line)
- Cycle Time 80 sec (Second line)
- 2 Robots for Test Area (Steering hydraulic Test)
- 1 Robot + Washing Machine Area (Rack and Protector
- Traceability process by QR code marked by Laser.
- Customer Production software communication



STEERING BUSINESS



Housing Assembly Area



Rack Protector Robotized Washing Cell

STEERING BUSINESS



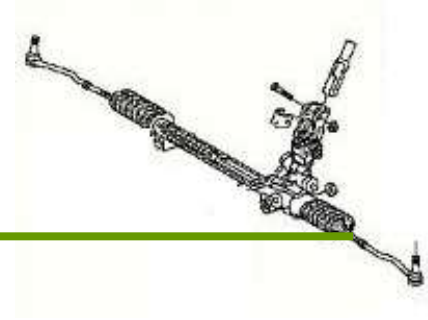
Leak and Hydraulic Test Area



Outer , Inner Balls and Bellows Assembly Process

Washing Machines

STEERING BUSINESS



- Steering Housing Automatic Washing Machine



Rotary Plate Version



Continues Washing Process

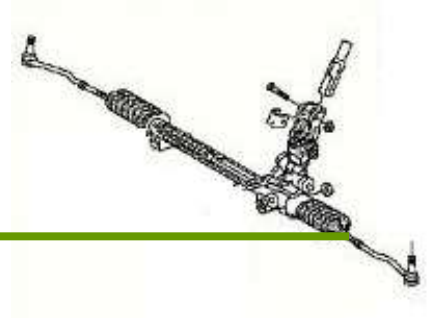


STEERING BUSINESS

- RBN Rack Automatic Washing Machine



Continues Washing Machine





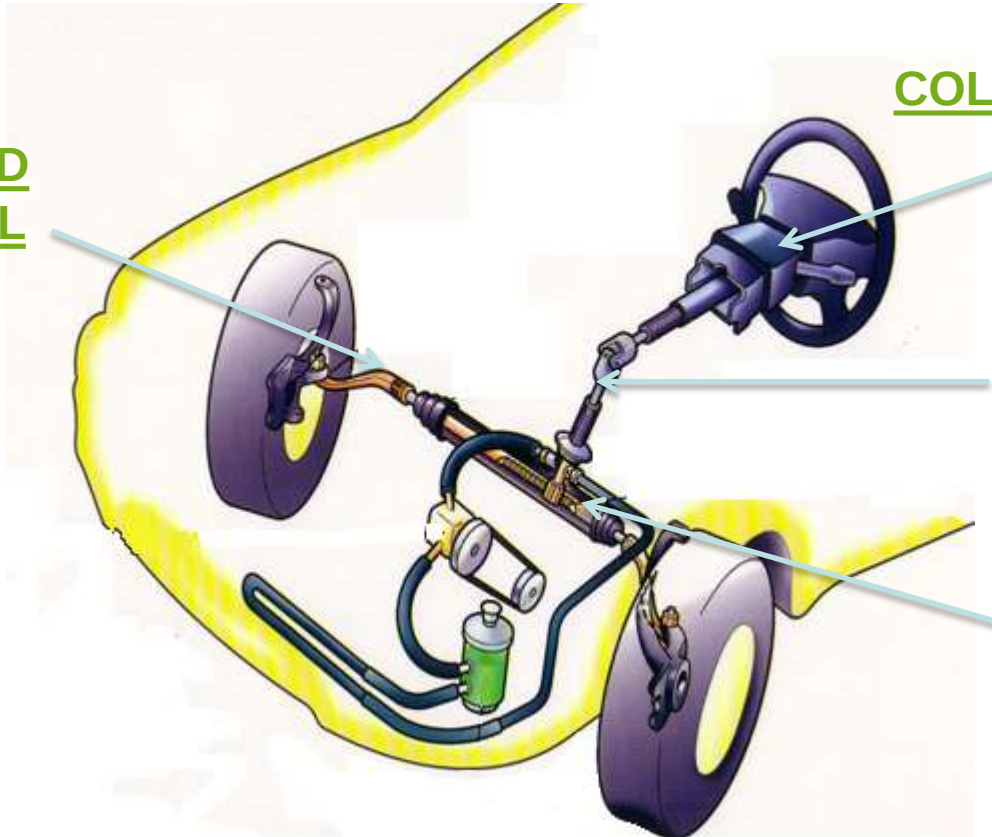
Our Experience

OUTER AND
INNER BALL
JOINT

COLUMN ASSEMBLY LINES
AND MACHINES

SHAFT MACHINES
AND ASSEMBLY

STEERING
HOUSING



OBJ & IBJ

TRAGGELENKE



TRAGGELENKE

Automatische Montage und Kontrolle der Tragelenke

o Taktzeit: 6,5 sek.

o Arbeitsstufen:

- Automatische Zuführung von allen Bestandteilen.
- Drehmomentkontrolle.
- Endkontrolle, mittels Bildverarbeitungssystem, des fertigmontierten Traggelenkes.



TRAGGELENKE

Automatische Montage und Kontrolle der Tragelenke



Prüfmaschine für Torsionskraft von Transmissionswellen

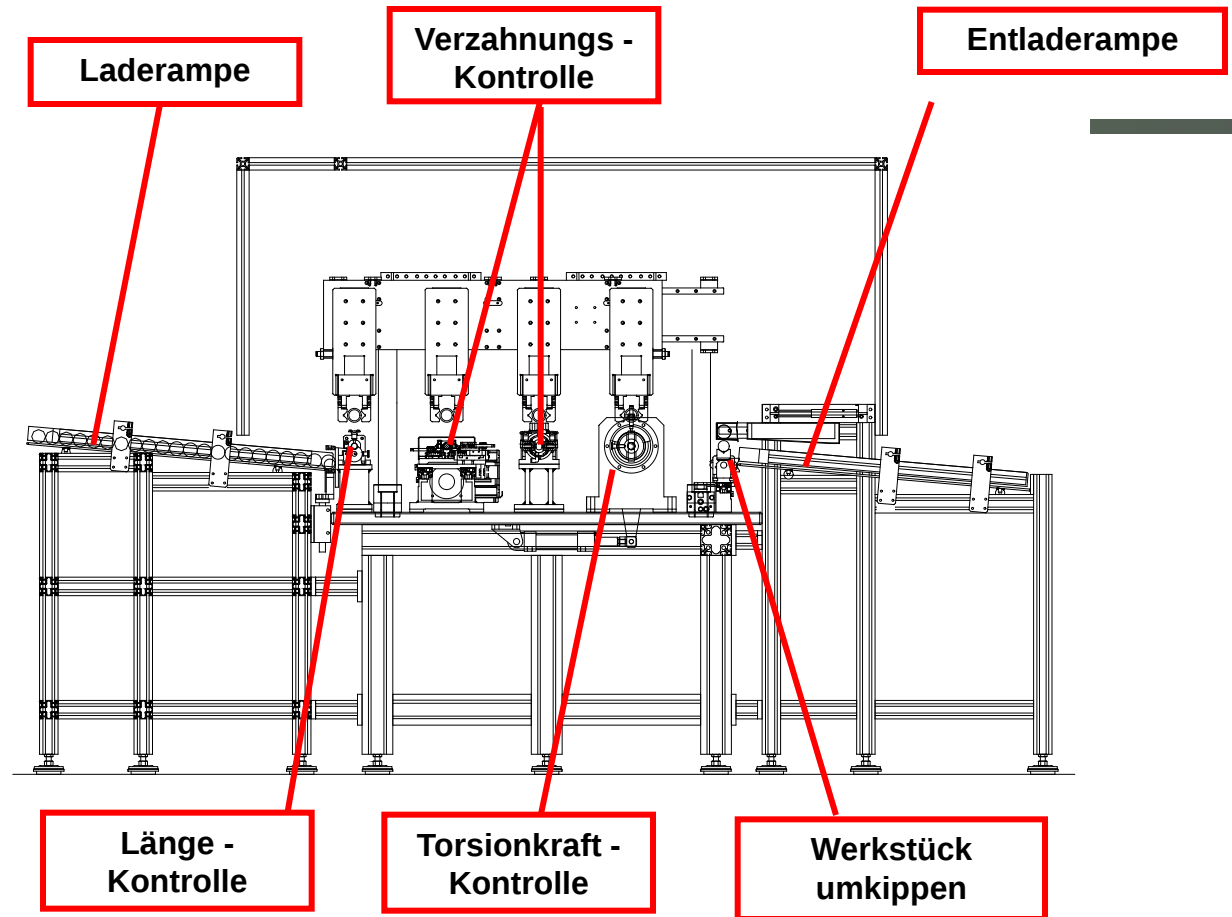
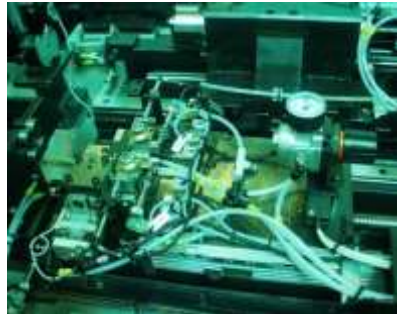


Technische Daten

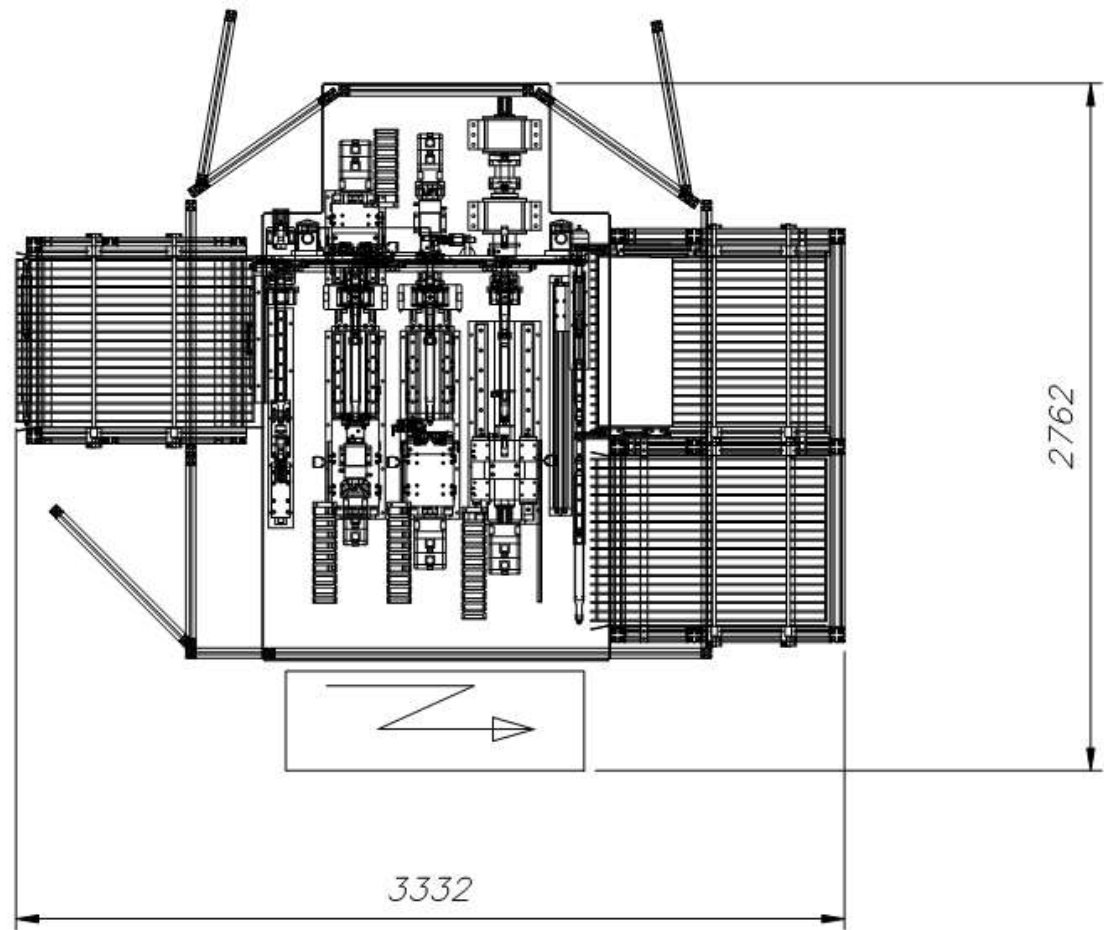
Gesamte Werkstücklänge: 400 – 440 mm.
Max. Durchmesser : 36 mm.
Rillendurchmesser : 26,550 - 26.675 mm.
Masstoleranz : 0.04 mm.
Max. Kraftmoment : 1250 □ 50 Nm.
Max. Gewicht : 2,5 Kg.
Taktzeit : 13 □ 14 seg.
Umrüstzeit : 10 min.



Prüfmaschine für Torsionskraft von Transmissionswellen



Prüfmaschine für Torsionskraft von Transmissionswellen



Prüfmaschine für Torsionkraft von Gelenkwellenköpfen



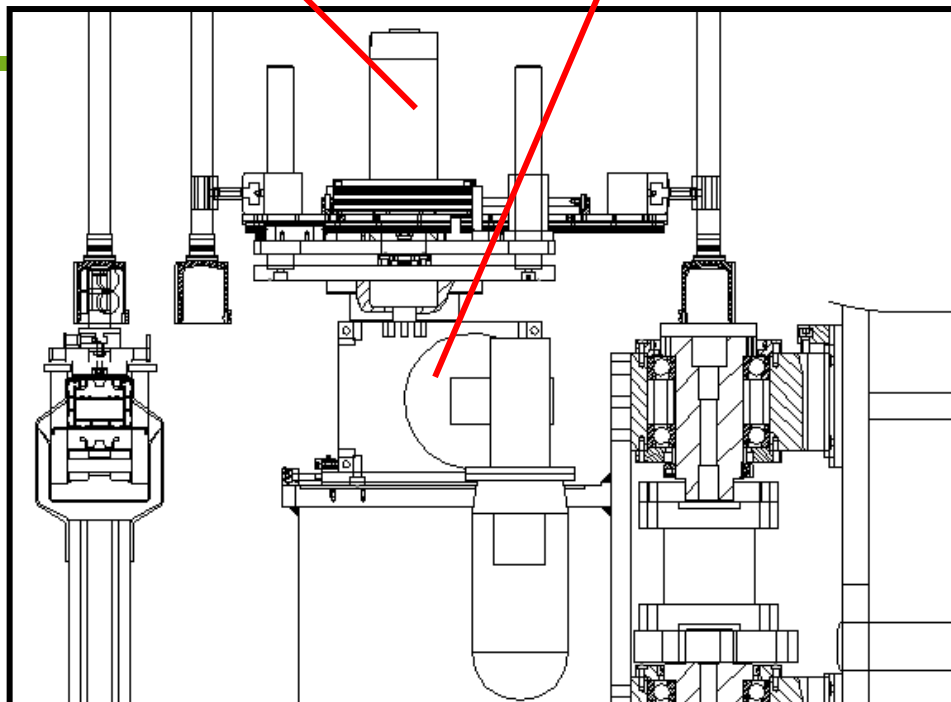
Technische Daten :

- Werkstücklänge 300 / 700 mm
- Max. Durchmesser 120 mm
- Max. Gewicht 8 Kg
- Taktzeit 18 seg
- Max. Kraftmoment 4000 Nm



Pneumatischer Zylinder

Dreheinheit "UGI"



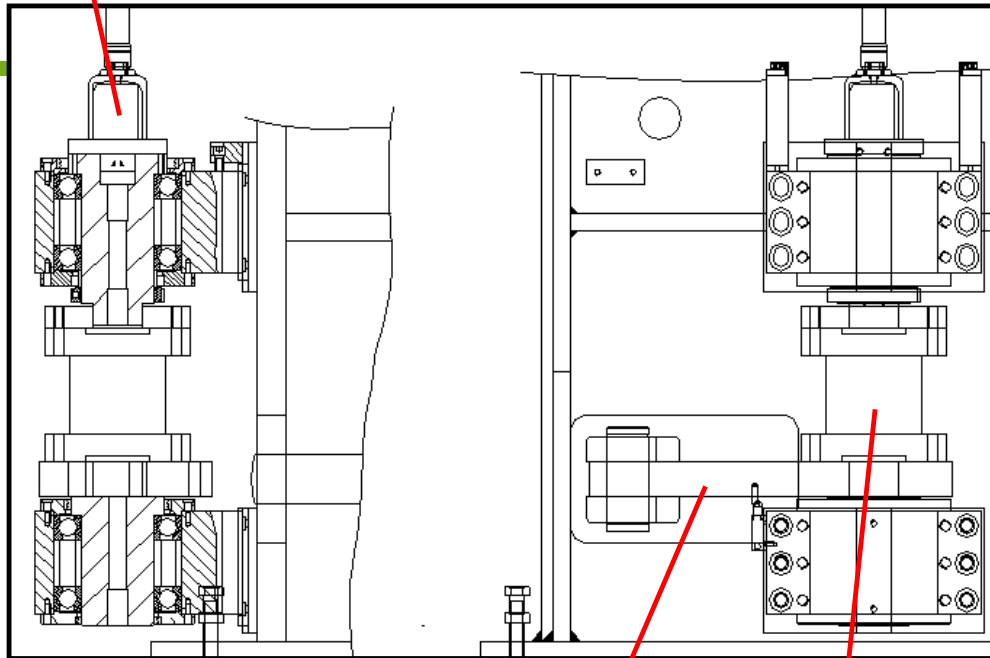
HANDHABUNGSGERÄT

Die Baugruppe Handhabungsgerät ist auf dem Maschinenbett montiert und zuständig für das automatische Laden und Entladen der Prüflinge in die und aus der Torsion-Prüfstation



Prüfmaschine für Torsionkraft von Gelenkwellenköpfen

Gelenkwellenkopf



Hebel

Kraftmomentsensor

Baugruppe Torsion



LENKUNGSGELENKE

Vormontage der Lenkungselenke



LENKUNGSGELENKE

Vormontage der Lenkungsgelenke

o Taktzeit: 8 sek.

o Arbeitsstufen:

- Referenzmarkierung.
- Montage von Kugelbuchse mit Gelenk und Fettdosierung.
- Montage von Sicherheitsring.
- Bördeln mit Servomotor und Kraftüberwachung.
- Automatische Entladen von Teilen i.O./nicht i.O.



LENKUNGSGELENKE

Endmontage der Lenkungselenke



LENKUNGSGELENKE

Endmontage der Lenkungsgelenke

o Taktzeit: 8 sek.

o Arbeitsstufen:

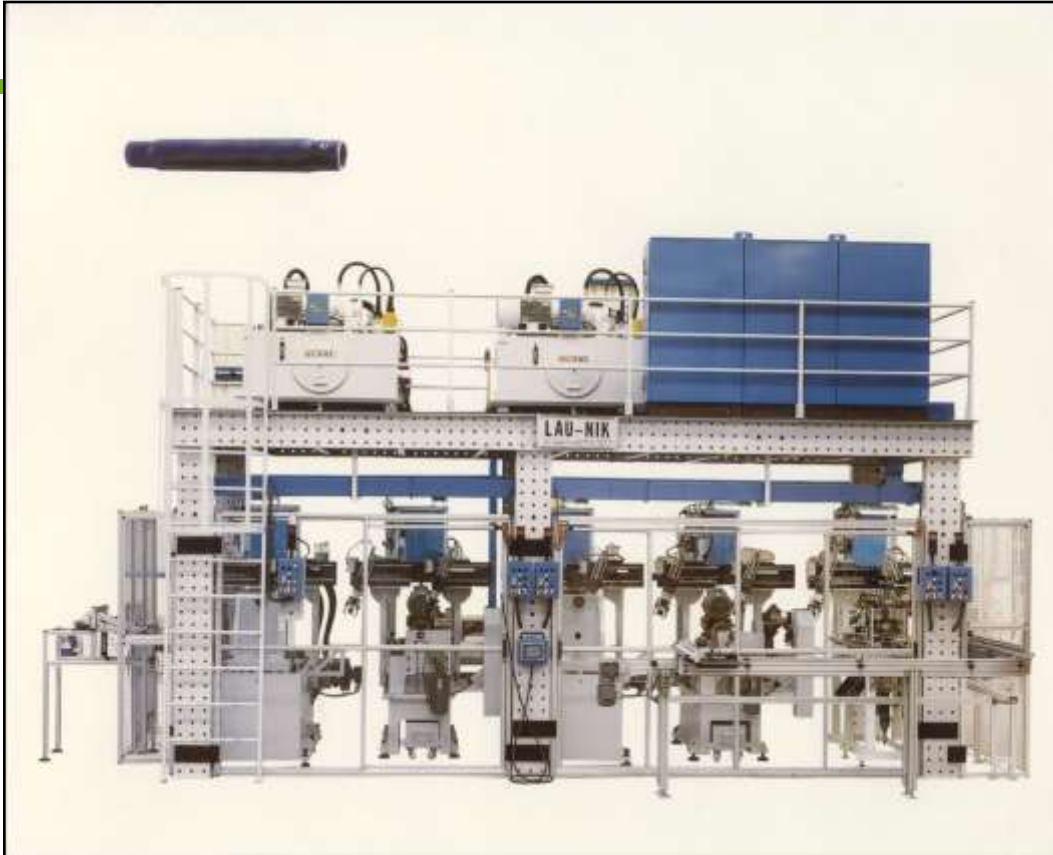
- Referenzmarkierung.
- Montage von Kugelbuchse mit Gelenk und Fettdosierung.
- Montage von Sicherheitsring.
- Bördeln mit Servomotor und Kraftüberwachung.
- Automatische Entladen von Teilen i.O./nicht i.O.



Safety Business

Airbag - Rohren

Fertigungslinie für Airbag - Rohren



Eigenschaften

- o TZ : 5 "
- o Rohrdurchm : 20 -30mm
- o Rohrlänge : 120 – 300mm

Airbag - Rohren

Maschine zur Herstellung von Airbag - Rohren



Eigenschaften

- o TZ : 4,3 "
- o Rohrdurchm : 25 -30mm
- o Rohrlänge : 110 – 320mm



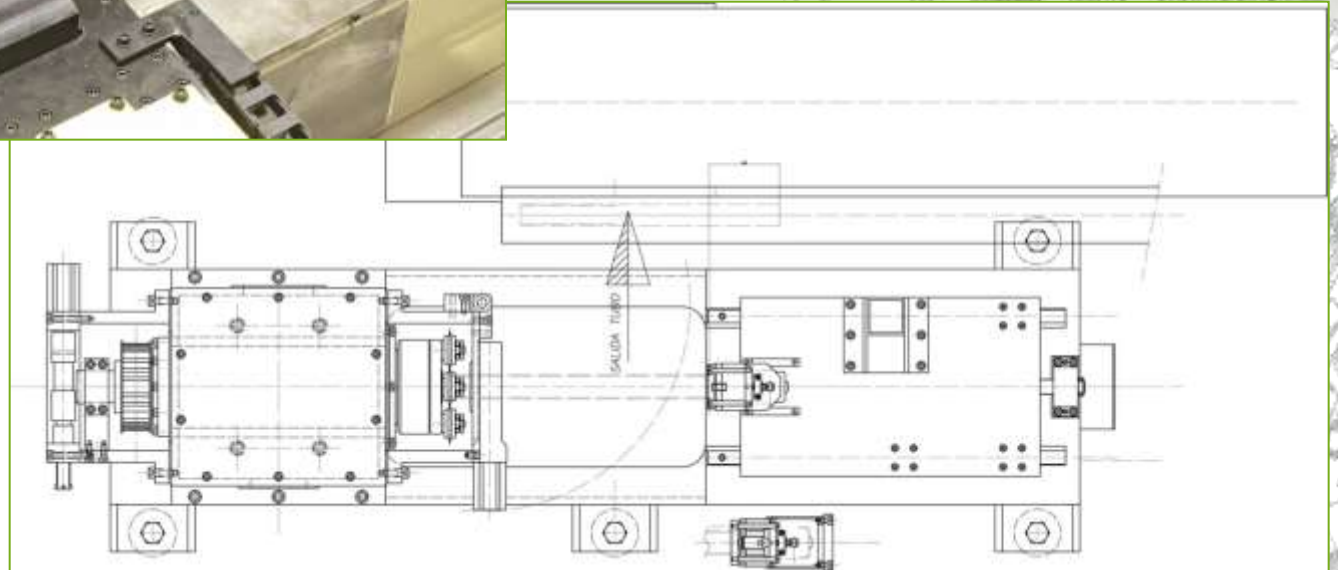
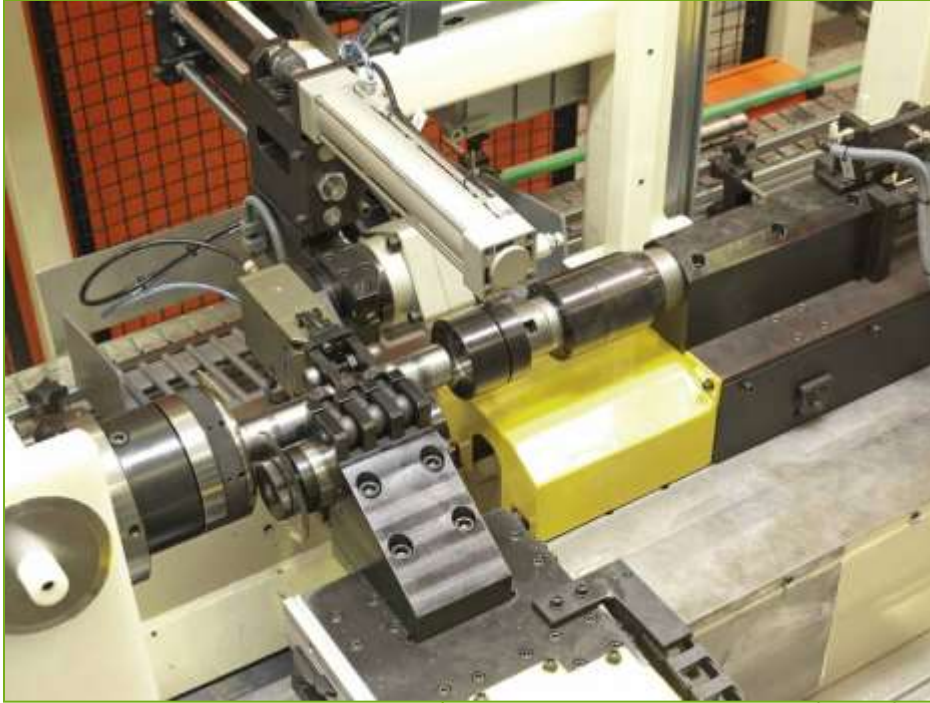
Shock Absorberds

Tube Machining and Welding Line

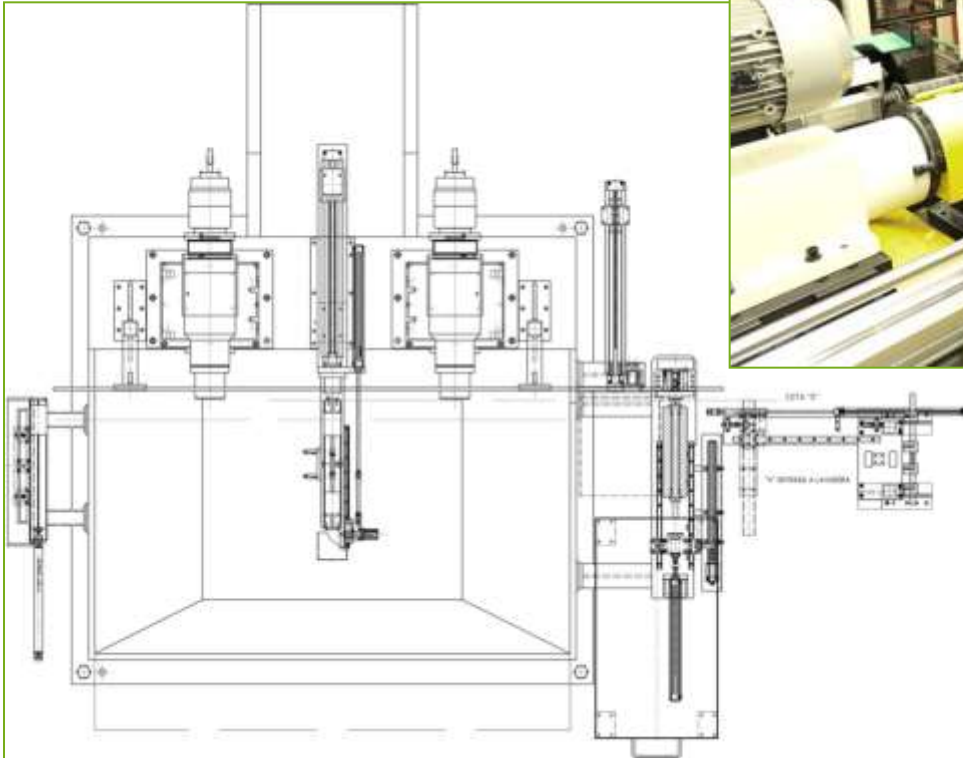


LAU-NIK
Máquinas Especiales

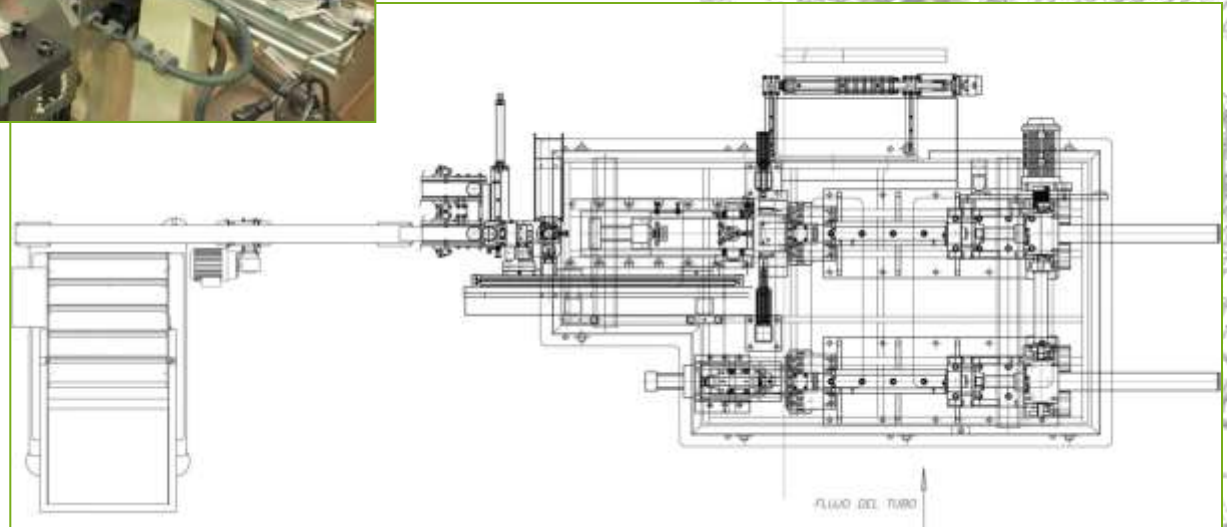
Schneidemaschine



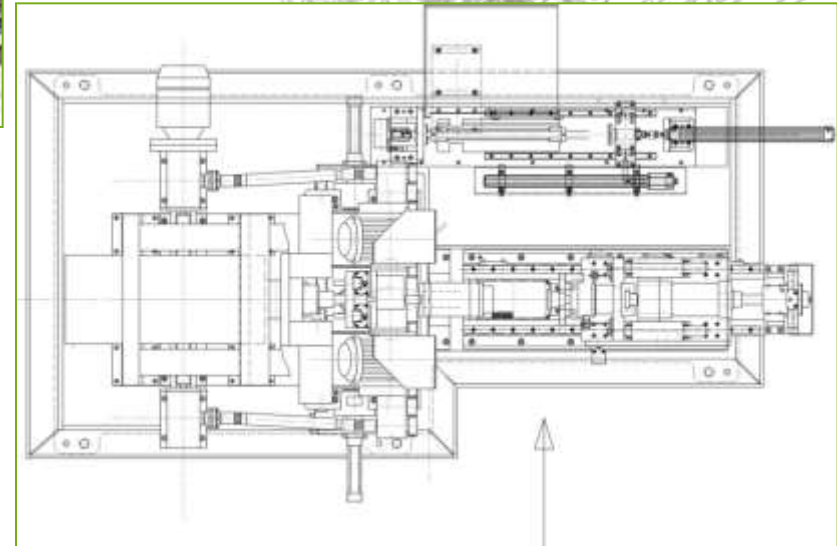
CNC Bearbeitungszentrum



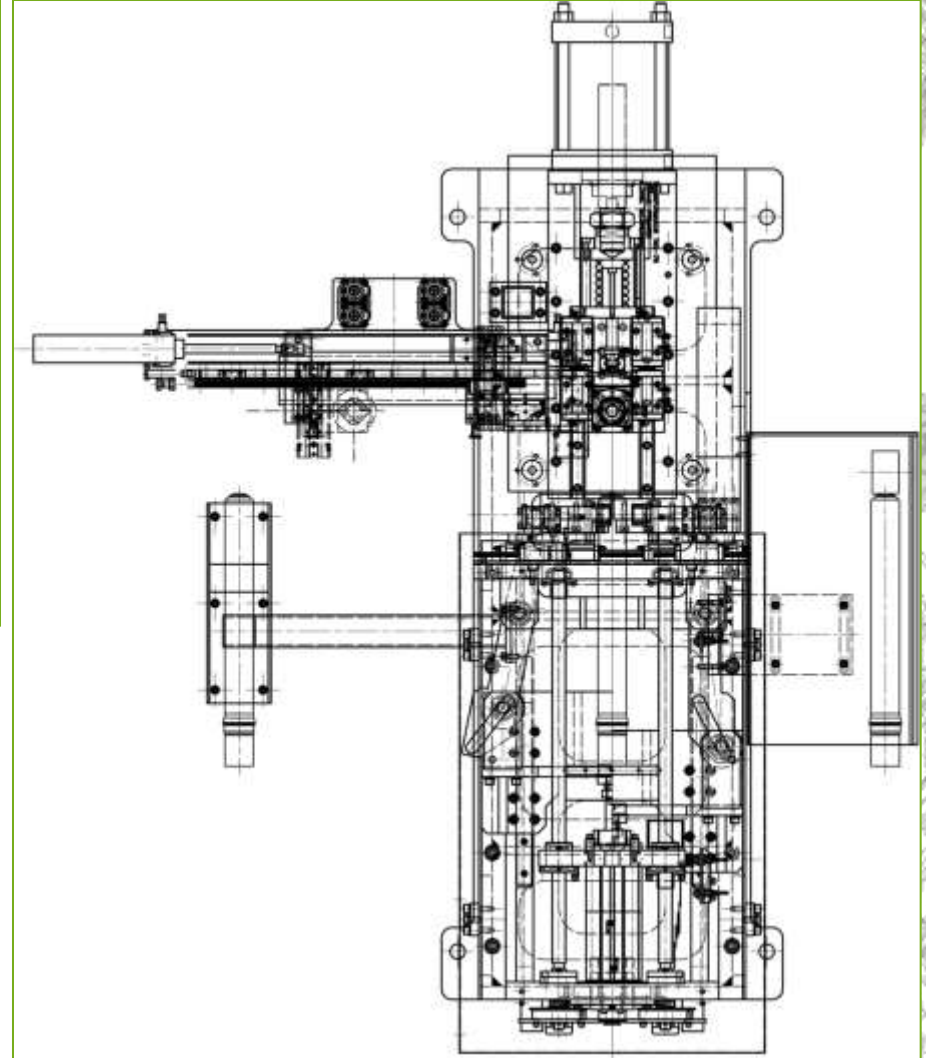
Kappe einpressen



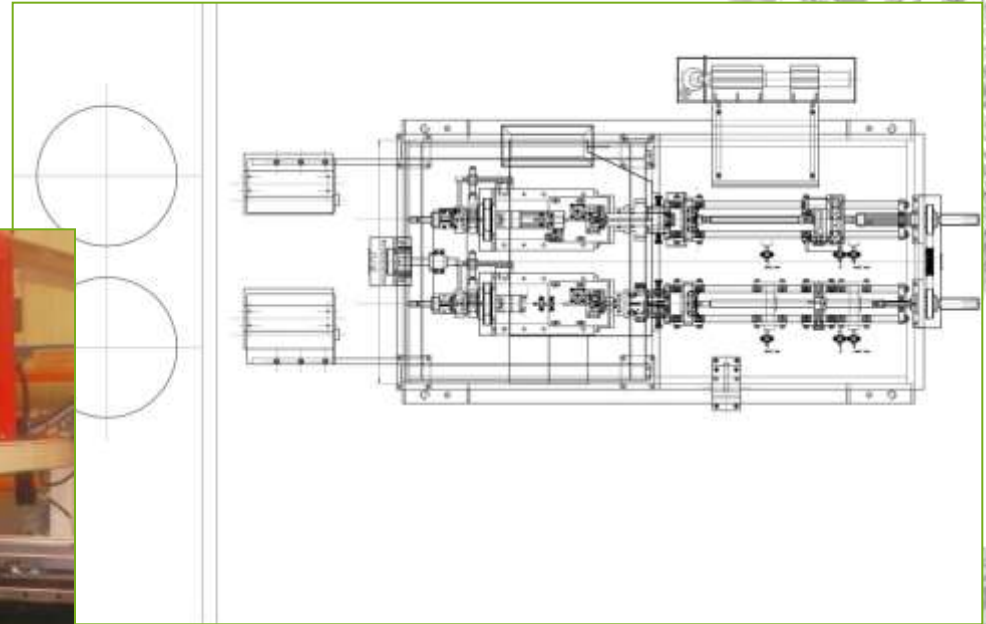
Rollnaht-Schweissmaschine



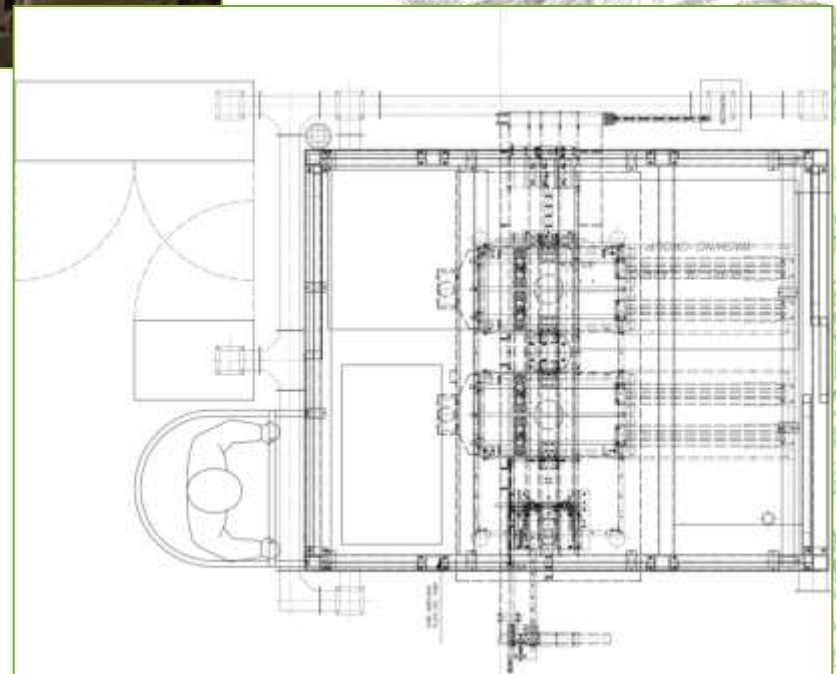
Widerstandsschweißmaschine



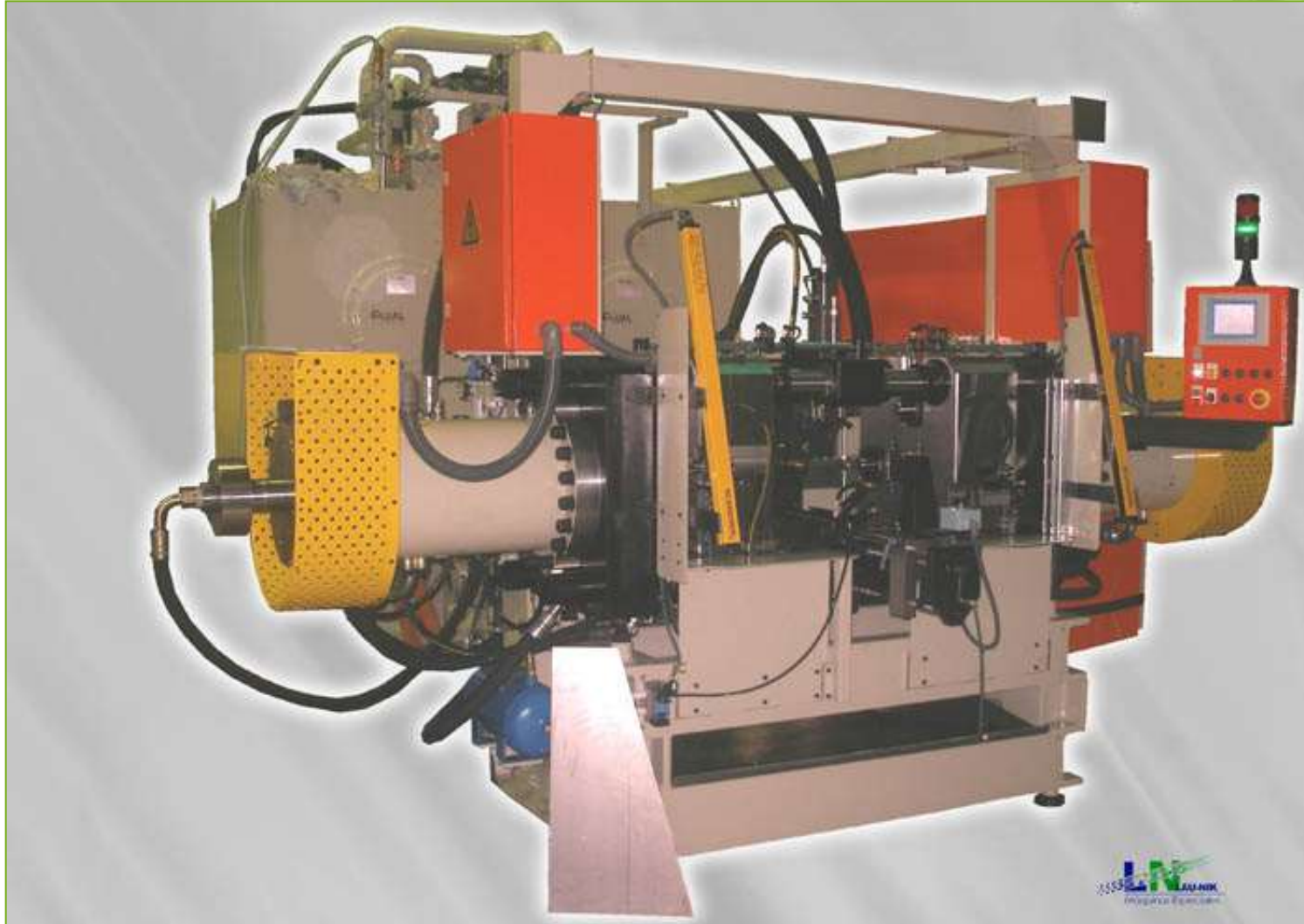
MIG / MAG Schweißmaschine



Waschmaschine



Kalibrierung und Stanzmaschine



Kalibrierung und Stantzenmaschine



Kolbenstangen Montagelinie



Kolbenstangen Montagelinie (6 Sekunden)



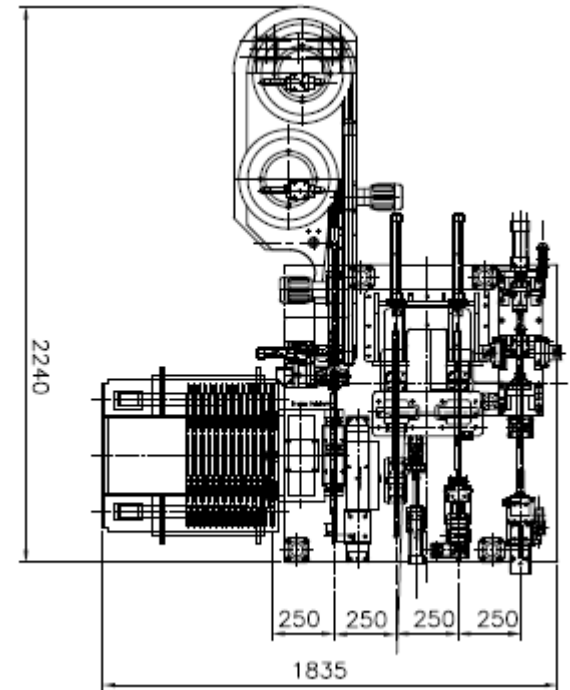
Kolbenstangen Montagelinie (6 Sekunden)



ROD STRAIGHTENING MACHINE



AUTOMATIC RESISTANCE OR CRIMPING MACHINE



Welded assembly

Fusion is produced by the heat obtained from resistance of the work pieces to electric current and by application of pressure.



Clamped assembly

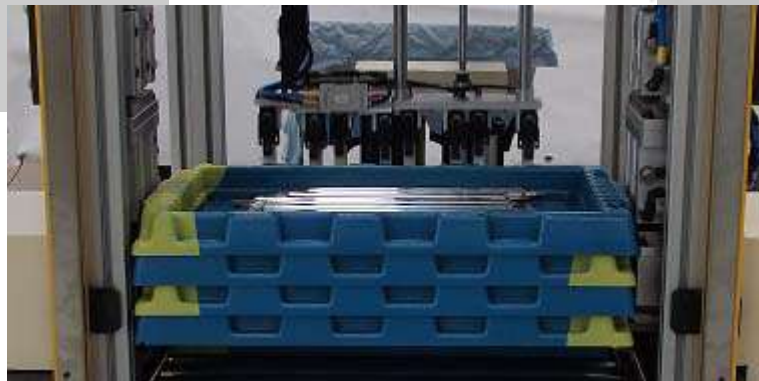
Ring fastening is obtained by means of clamping several points around the circle.



Encased assembly

Coupling is gotten encasing the Ring in its proper rod's slot.

ROD PALLETIZED FEEDER



ROD ASSEMBLY LINE



Bodenventil Montage



Bodenventil Montage (3,5 Sekunden)



Bördeln



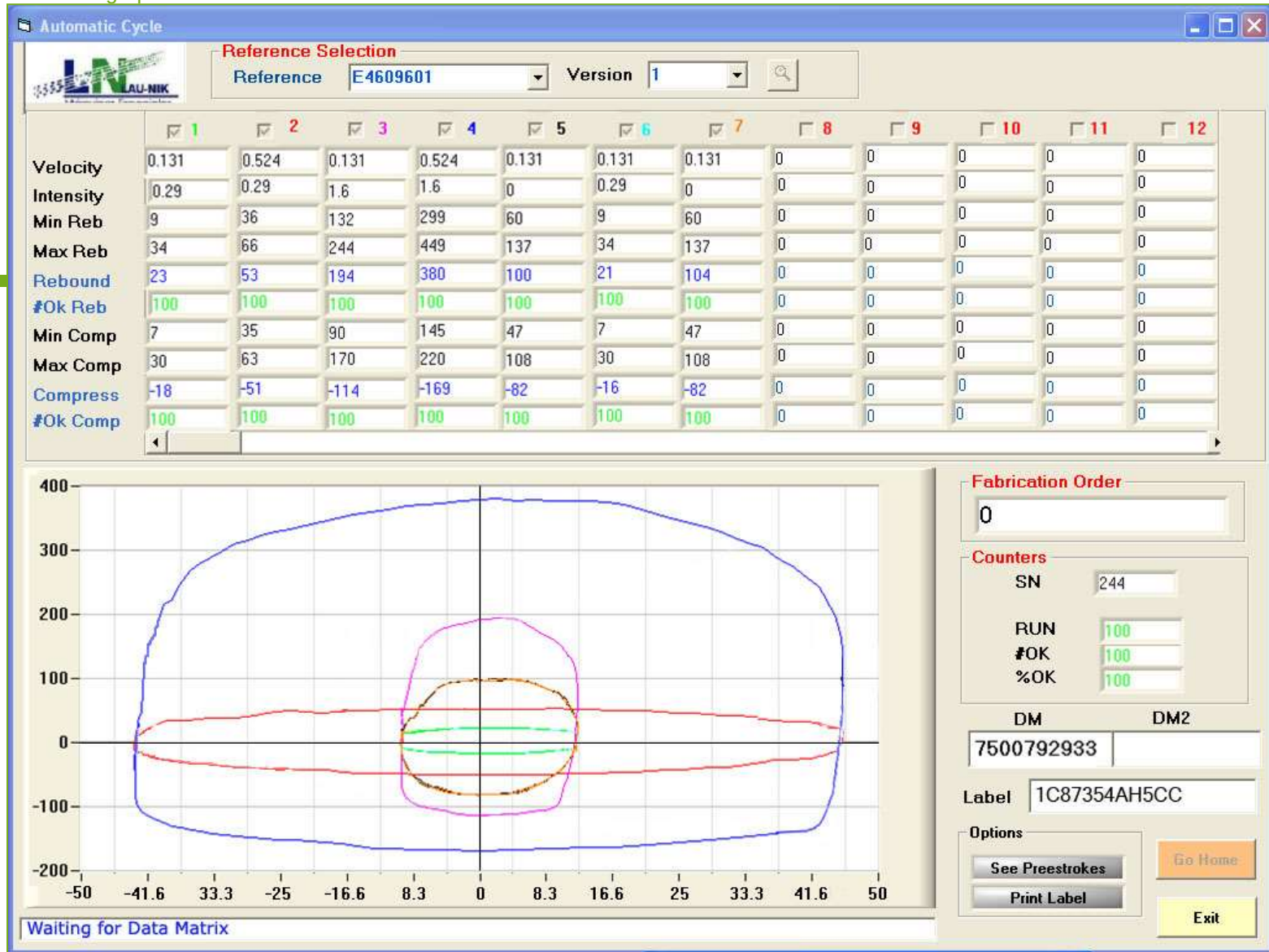
Bördelmaschine



Gasfüllmaschine & Gasdruck Überwachung (6 Sekunden)







Stoßdämpfermontagelinie (6 Sekunden)



Stoßdämpfermontagelinie (8 Sekunden)



Stoßdämpfer Montagelinie (15 Sekunden)



Herzlichen Dank
Thank you very much

