



# Pneumatik flex



Osnovani smo 1970. godine i od tada se bavimo proizvodnjom i servisom hidrauličkih i pneumatskih komponenti. Tada smo radili samo fleksibilne i krute cevi i creva za sprovođenje fluida (tečnosti, gasova, rasutih i žitkih materijala).

Porodično preduzeće **SRBOAUTO**, čiji su vlasnici tri rođena brata, 2003. godine postaje vlasnik **Pneumatik flex-a**. U isto vreme sa privatizacijom, počeli smo da širimo proizvodni program na područje održavanja i izrade hidrauličnih sistema.

Mi danas:

- 1 – PLANIRAMO**
- 2 – PROJEKTUJEMO**
- 3 – PROIZVODIMO**
- 4 – PRODAJEMO i**

**5 - SERVISIRAMO** hidraulične i pneumatske sisteme (pumpe, hidromotore, ventile, cilindre, akumulatore, aggregate...) i fleksibilna creva sa priključcima svih vrsta i namena!

Na prvom mestu nam je zadovoljstvo kupaca i korisnika naših proizvoda i usluga. Posedujemo certifikat o kvalitetu TÜV SÜD sistema za upravljanje kvalitetom prema zahtevima standarda ISO 9001 . Pored odobrenja za rad sa vojnim ustanovama, dosta sarađujemo sa Fakultetom tehničkih nauka u Novom Sadu. Distributeri smo firme PARKER, jedne od vodećih firmi u svetu u području hidraulike i pneumatike.

**PNEUMATIK FLEX** was founded in 1970 and since then it has been manufacturing and providing overhaul for hydraulic and pneumatic equipment. At the beginning we dealt only with flexible and solid pipes and hoses for conveying fluids (liquids, gases, powdery and semi soft materials).

In 2003 a family run company, **SRBOAUTO**, lead by three brothers, became the owner of our company.

Together with the change in ownership, we started with expanding production into the area of maintenance and manufacture of hydraulic systems.

Today, we:

- 1 – PLAN**
- 2 – DESIGN**
- 3 – MANUFACTURE**
- 4 – SELL and**

**5 – OVERHAUL** hydraulic and pneumatic systems (pumps, hydro-motors, valves, cylinders, accumulators, aggregates, etc.) and flexible hoses with couplings of all types and applications!

Our clients' satisfaction is our first priority. We have obtained the quality certificate issued by the TÜV SÜD system for quality management per requirements of ISO 9001 standards. Apart from the approval to work with the military institutes, and we are frequently cooperating with the FTN (Faculty for Technical Sciences) in Novi Sad. We are also distributor for PARKER, one of the leading companies in the world for hydraulic and pneumatic components.

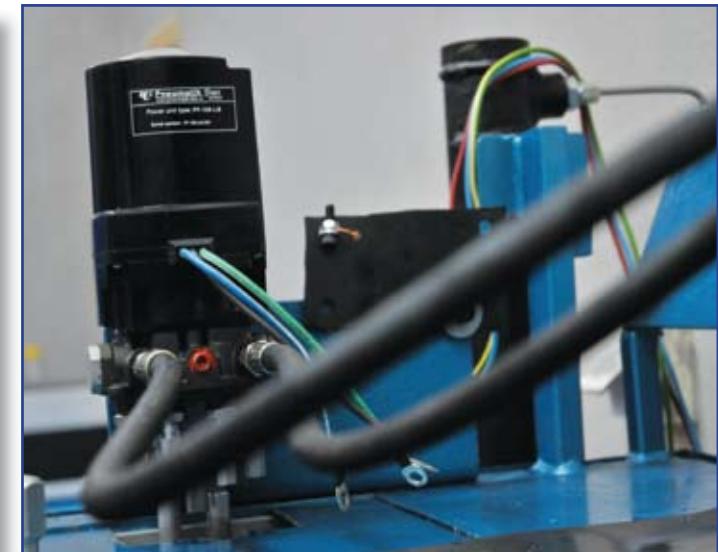


Mašina za brizganje aluminijuma  
Aluminum injection machine



Mi smo za potrebe proizvođača aviona UTVA Pančevo 2010. godine, isprojektovali, izradili i homologovali hidraulični agregat za pogon stajnog trapa aviona. Ovaj agregat se može ugraditi i za pogon drugih mehanizama. Agregat je izrađen od baznih komponenti proizvodnje PARKER. Homologacija (ispitivanje karakteristika) izvršeno je u laboratorijskim institutima Orao Bijeljina.

We have in 2010. designed, manufactured and homologed hydraulic aggregate for aircraft landing gear for the aircraft manufacturer UTVA, Serbia. This aggregate can be built in the drive of other mechanisms as well. Its basic components are made by PARKER. Homologisation is carried out in the testing laboratory of the ORAO institute in Bijeljina (RS).

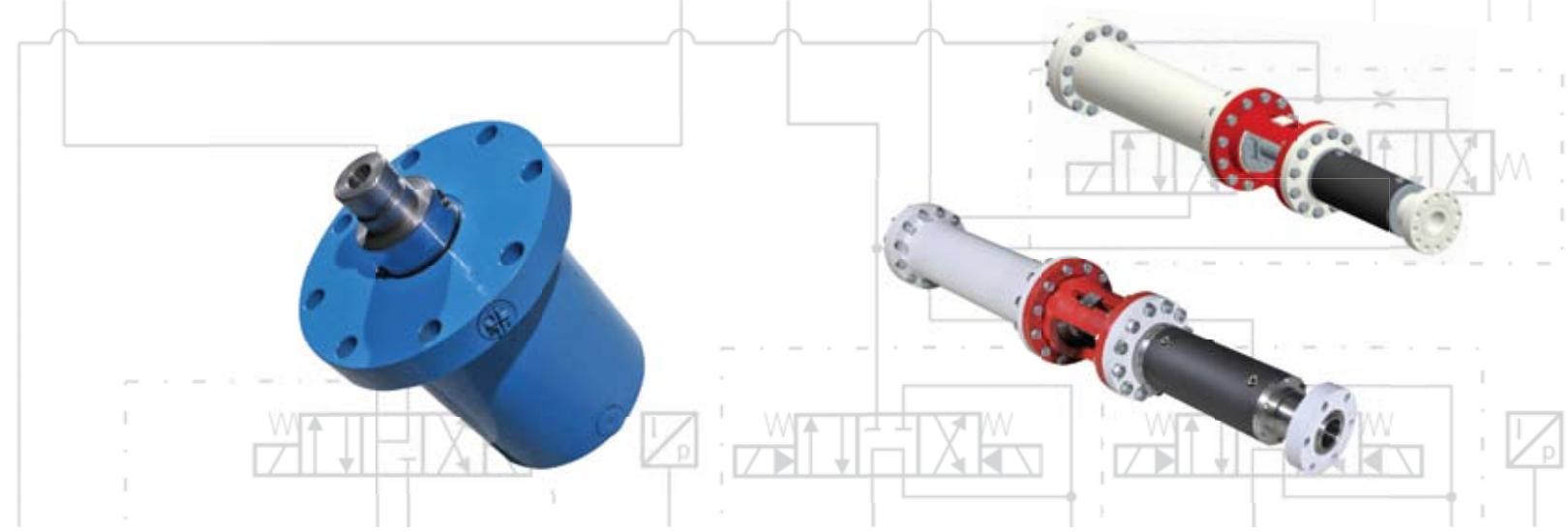


Ispitni sto sa upravljačkim ormarom (kompletna konstrukcija Pneumatik flex)  
Testing equipment with control cabinet (complete construction by Pneumatik flex)

Ispitivanje hidrauličnog agregata za pogon stajnog trapa aviona  
Testing hydraulic aggregate for aircraft landing gear

## HIDRAULIČNI CILINDRI, remont i izrada novih cilindara

HYDRAULIC CYLINDERS, overhaul and manufacture of new cylinders



Cilindri standardne konstrukcije  
Standard Cylinders

CILINDRI SPECIJALNIH KONSTRUKCIJA  
Primer specijalnog cilindra u fazi projektovanja i izrađenog cilindra  
SPECIAL CONSTRUCTION CYLINDERS  
Special construction cylinder manufacturing process in two phases:  
design and delivery

Remontujemo cilindre u širokom dijapazonu prečnika i dužina. U sklopu remonta cilindra obavezno se menjaju zaptivni setovi, a klipnjače i cilindarska cev po potrebi menjaju ili dovode u ispravno stanje.

Proizvodni program izrade cilindara kreće se u dva pravca:

- cilindri standardne konstrukcije sa jednostranom ili dvostranom klipnjačom i
- posebne konstrukcije po zahtevu kupca.

We overhaul cylinders of a wide range of diameters and lengths. The overhaul of cylinders includes mandatory replacement of gasket sets, while piston rods and the cylinder tube are replaced if necessary or repaired.

The cylinder product line covers two categories:

- Single and double rod design-standard cylinders
- Custom made design – special construction cylinders



Cilindri mašine za demontažu kardanskih zglobova  
Cylinders for kardan joint disassembly machine



Cilindri na mašini za prosečanje lima  
Cylinders in tin cutting machine

# BLOKOVI ZA HIDRAULIČNE SISTEME

## HYDRAULIC SYSTEM BLOCKS

Proizvodimo tipske i blokove po posebnoj konstrukciji. Svaki blok posebno projektujemo, izrađujemo i ispitujemo.

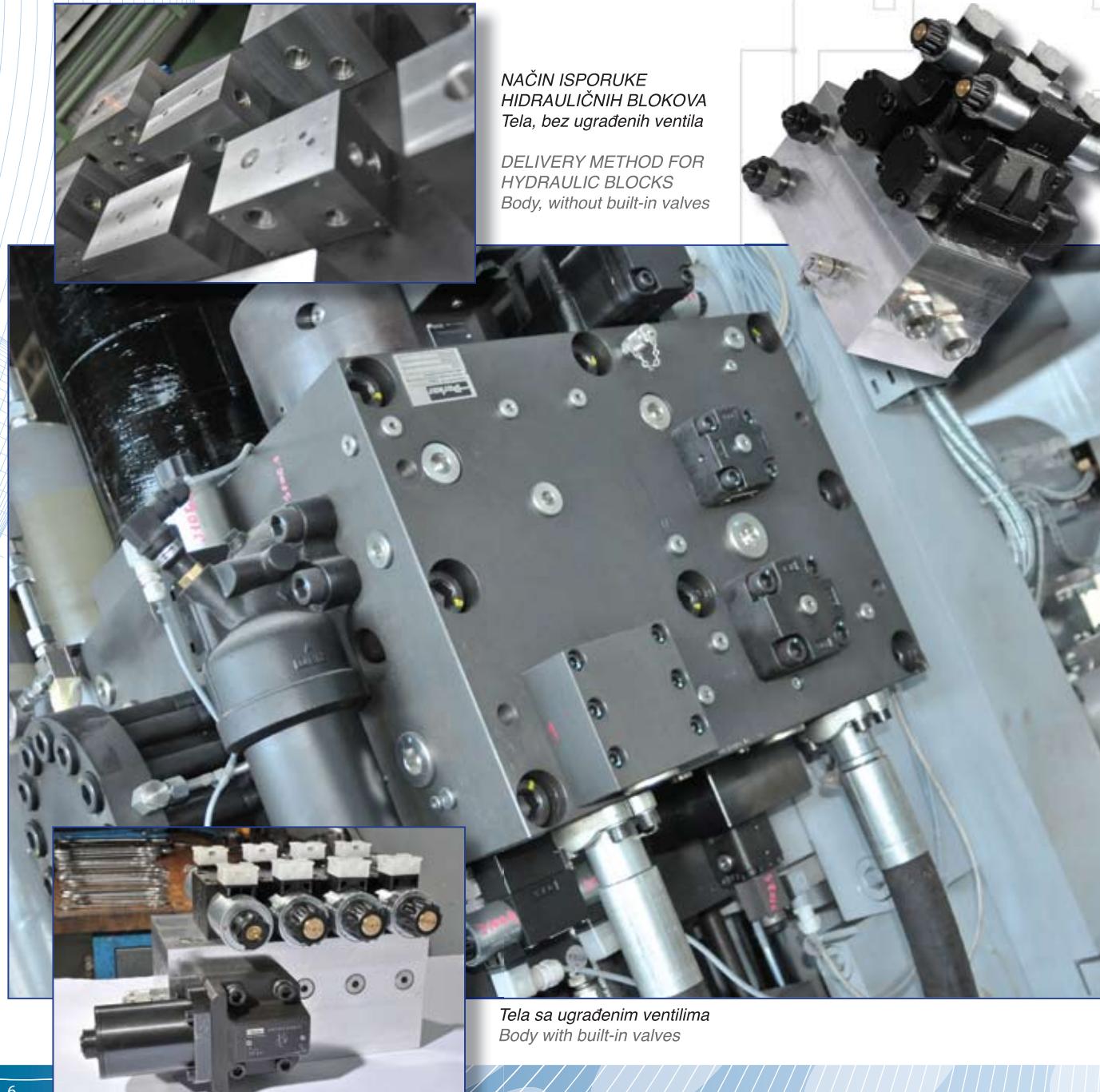
### TIPSKI BLOKOVI izrađeni po internim standardima

Konstrukcija tipskih blokova dimenzijama je usaglašena sa standardima NG 6/ CETOP 03 i NG 10/ CETOP 05.

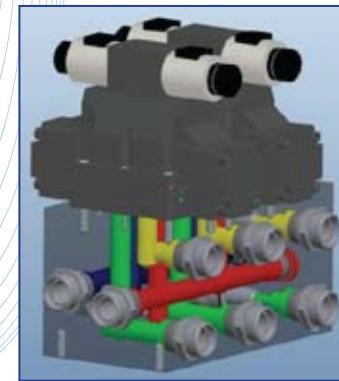
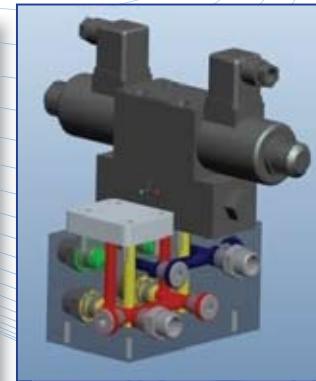
We manufacture standardized and custom made blocks. Each block is separately designed, manufactured and tested.

### STANDARDIZED BLOCKS designed according to internal standards

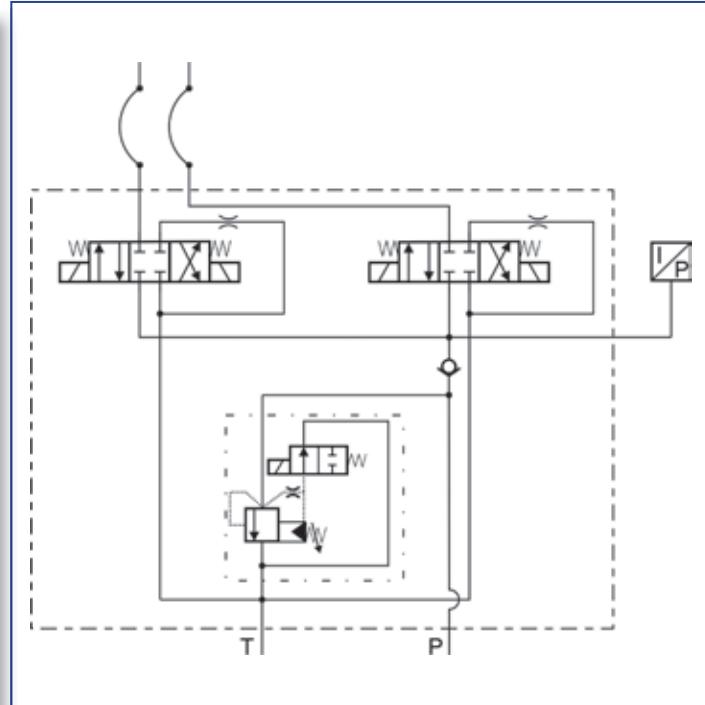
Measurements in manufacturing of standardized blocks are in accordance with NG 6/ CETOP 03 and NG 10/ CETOP 05 standards.



Izgled specifične konstrukcije bloka sa odgovarajućim ventilima  
A custom-made block with built-in valves



**SPECIJALNE KONSTRUKCIJE BLOKOVA** projektuju se i proizvode po zahtevima korisnika. Oni se ugrađuju u hidraulične sisteme koje smo projektovali mi - Pneumatik flex ili kupac.  
**CUSTOM MADE BLOCKS** are designed and manufactured according to the needs of our clients. They are built into the hydraulic systems designed by Pneumatik Flex or the client.



Hidraulična šema iz projektovanih blokova  
Hydraulic drawing of designed blocks



Ispitivanje bloka sa hidrauličnim komponentama  
Testing a block with hydraulic components



Funkcija i izrada svakog proizvedenog bloka ispituje se na ispitnom stolu koji je projektovan i izrađen kod nas u Pneumatik flex-u.

Performance and quality of every manufactured block is tested with testing equipment designed and produced by Pneumatik Flex.

# POVEZIVANJE KOMPONENTI U CELINU HIDRAULIČNOG SISTEMA

## CONNECTING COMPONENTS IN THE HYDRAULIC SYSTEM

Izvodimo kompletne cevovodne instalacije za povezivanje komponenti u jedinstven hidraulični sistem.

We carry out complete tubing installation for connecting hydraulic components into a complete hydraulic system.



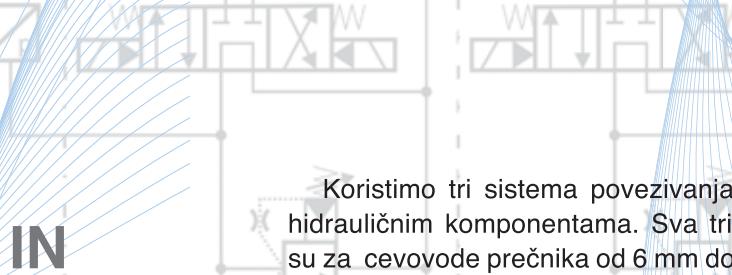
Montirao PNEUMATIK FLEX - presa za livenje aluminijuma pod pritiskom  
Assembled by PNEUMATIK FLEX - aluminum forging press



Hidraulični agregat u procesu montaže  
Hydraulic aggregate in assembly process



Montirana cev - instalacija na hidrauličnom agregatu  
Assembled tube - installed in hydraulic aggregate



Koristimo tri sistema povezivanja krutih cevovoda sa hidrauličnim komponentama. Sva tri sistema namenjena su za cevovode prečnika od 6 mm do 4" i radne pritiske do 400 bar, a montiraju se bez zavarivanja i demontažni su.

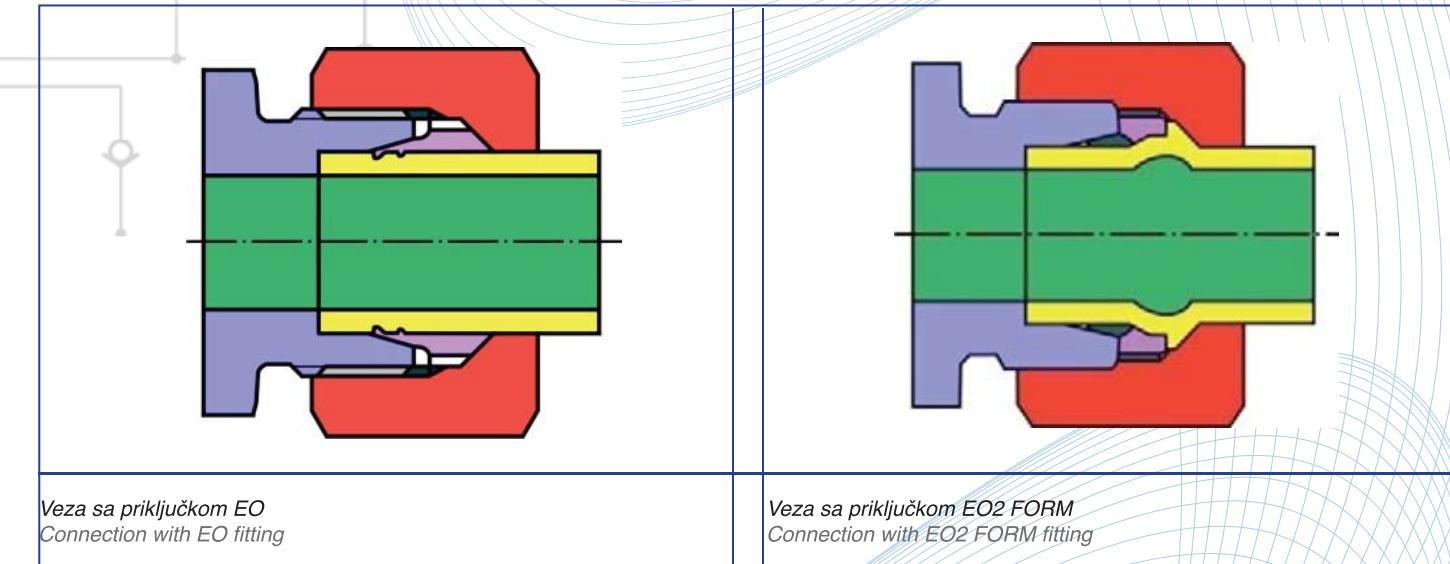
Za povezivanje krutih cevovoda prečnika 6 do 42 mm koriste se priključci proizvodnje Parker po sistemu:

- EO (ERMETO) sa progresivnim prstenom i EO2 FORM sa elastičnim prstenom.

We are using three systems for connecting rigid tubing to hydraulic components. All three systems are designed for tubes with a diameter of 6 mm to 4" and working pressures to 400 bar. Tubing is installed without welding and can be disassembled.

For connecting rigid tubes of 6 to 42 mm diameter we use fittings of EO Ermeto system:

- EO (ERMETO) progressive ring fittings and EO2 FORM elastic ring fittings.



Veza sa priključkom EO  
Connection with EO fitting

Veza sa priključkom EO2 FORM  
Connection with EO2 FORM fitting



Mašina za savijanje i navlačenje progresivnog prstena tip EO na cev  
Machine for bending and attaching progressive EO ring



Mašina za deformaciju cevi za vezu sa priključkom EO2 FORM  
Tube forming machine for with EO2 FORM fitting

### NOVI SISTEM POVEZIVANJA CEVOVODA VELIKOG PREČNIKA I VISOKIH OPTEREĆENJA sistem F-37S

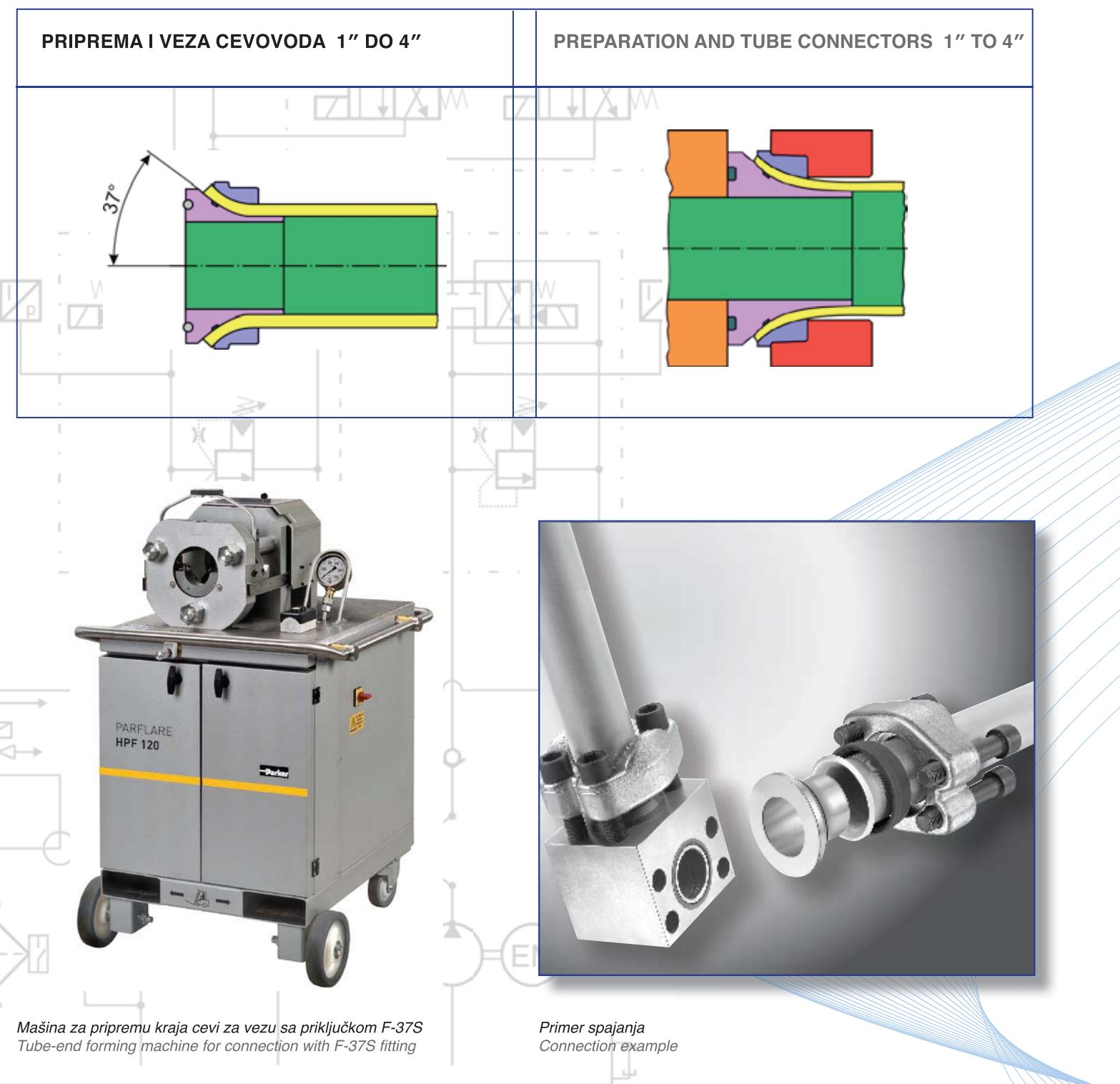
Osnovne karakteristike sistema povezivanja F-37S su:

- mogućnost povezivanja cevovoda velikog prečnika i kod visokih radnih pritisaka (do 400 bar),
- visok stepen zaptivanja kod trajnog udarnog opterećenja pritiskom i delovanja spoljašnjih vibracija,
- demontažan sklop.

### NEW SYSTEM FOR CONNECTING HIGH PRESSURE TUBES WITH LARGE DIAMETER AND HIGH LOAD- system F-37S

The basic features of the F-37S connecting system:

- Possible to connect large diameter tubes under high working pressure (to 400 bar),
- High degree of sealing under conditions of constant shock load pressure and external vibrations,
- Design allowing disassembly.



### PROGRAM CREVA ZA HIDRAULIKU – fleksibilni cevovodi sa priključcima



### HYDRAULIC HOSE PROGRAM – flexible hoses with couplings



Proizvodimo i servisiramo **fleksibilna i kruta creva i priključke raznih vrsta** i namena već 40 godina:

- protok nafte i naftnih derivata, vode, pare, prehrabbenih, abrazivnih, žitkih i praškastih materija
- gumena, plastična, termoplastična, metalna creva
- priklučci i spojnice od mesinga, aluminijuma, čelika i nerđajućeg čelika

Uz proizvodnju i servisiranje nudimo i **uslugu ispitivanja creva pod pritiskom**.

Takođe osvajamo i vojni program kao distributeri kompanije **PARKER** uvođenjem njihovog programa creva **STRATOFLEX**.

We have for 40 years manufactured and serviced **flexible and rigid hoses and fittings of various types and purposes**:

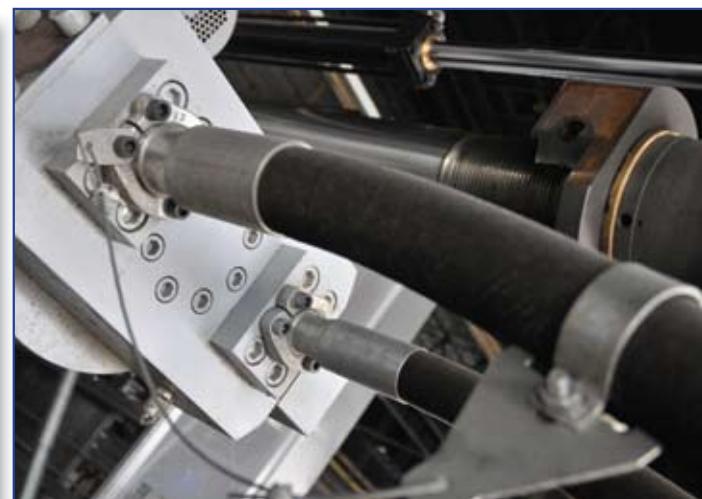
- Conveyance of oil and oil derivates, water, steam, food, abrasive, viscous and powdery materials
- Rubber, plastic, thermoplastic, metal hose
- Fittings and connectors made of brass, aluminum, steel and stainless steel.

Together with manufacturing and servicing we also offer hose testing under pressure.

We are also developing a military application program as distributors of **PARKER** by introducing their hose products branded as **STRATOFLEX**.



**Presa za montažu priključaka**  
Press for assembling fittings



**Creva u cevovodu hidrauličnog sistema**  
Hoses in a hydraulic system pipeline



# PROGRAM PROIZVODA PARKER

## PRODUCT MARKETING PARKER

Kao distributeri jedne od vodećih firmi u svetu u području hidraulike i pneumatike u svojoj ponudi imamo ceo assortiman hidrauličnih komponenti proizvođača PARKER:

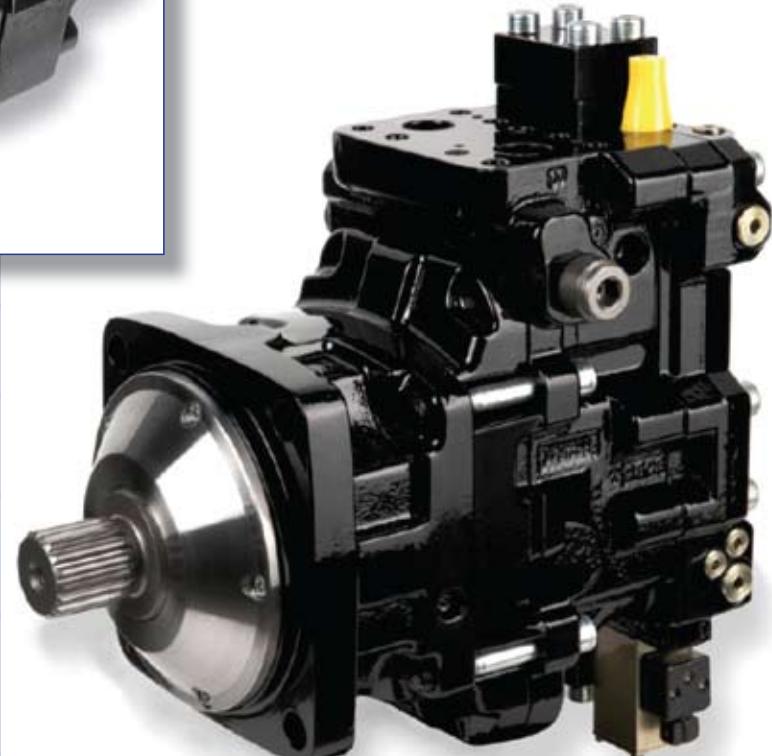
1. PUMPE
2. HIDROMOTORI
3. VENTILI
4. FILTERI
5. AKUMULATORI
6. PRIKLJUČCI

As distributor for one of the leading companies in the world in the field of hydraulics and pneumatics, we offer the whole range of hydraulic and pneumatic components by PARKER:

1. PUMPS
2. HYDROMOTORS
3. VALVES
4. FILTERS
5. ACCUMULATORS
6. FITTINGS



**PUMPE**  
Pumps



**HIDROMOTORI**  
Hydromotors



**VENTILI**  
Valves



**AKUMULATORI**  
Accumulators

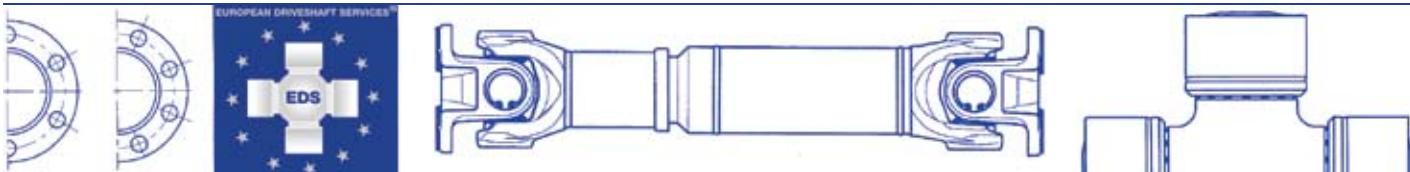


**FILTERI**  
Filters



# SRBOAUTO

KARDANSKA VRATILA



**SRBOAUTO** ([www.srboauto.co.rs](http://www.srboauto.co.rs)) je porodično preduzeće iz Beograda u vlasništvu tri brata. Jedan je od najvećih proizvođača i servisera kardanskih vratila i drugih transmisionih elemenata za vozila i industriju u jugoistočnoj Evropi.

Njegovu ponudu obuhvataju kardanska vratila za sve tipove vozila (putnička, kombi, kamioni, autobusi), građevinske i radne mašine, traktore, industrijska postrojenja, brodove, itd.

Aktivnosti Srboauta su podeljene u sledeće oblasti:

- Proizvodnja kardanskih vratila za prvu ugradnju
- Remont i rekonstrukcija postojećih zglobnih vratila
- Prodaja rezervnih delova za vozila.

**SRBOAUTO** ([www.srboauto.co.rs](http://www.srboauto.co.rs)) is a family owned company lead by three brothers. It is one of the biggest companies for manufacture and repair of drive shafts and other transmission elements for vehicles and industry in South East Europe.

They offer drive shafts for all types of vehicles (cars, vans, trucks, buses), construction and utility machines, tractors, industrial facilities, ships etc.

Company activities can be divided into the following areas:

- Manufacturing drive shafts for first time installation
- Repair and reconstruction of existing joint shafts
- Sale of spare vehicle parts.

