

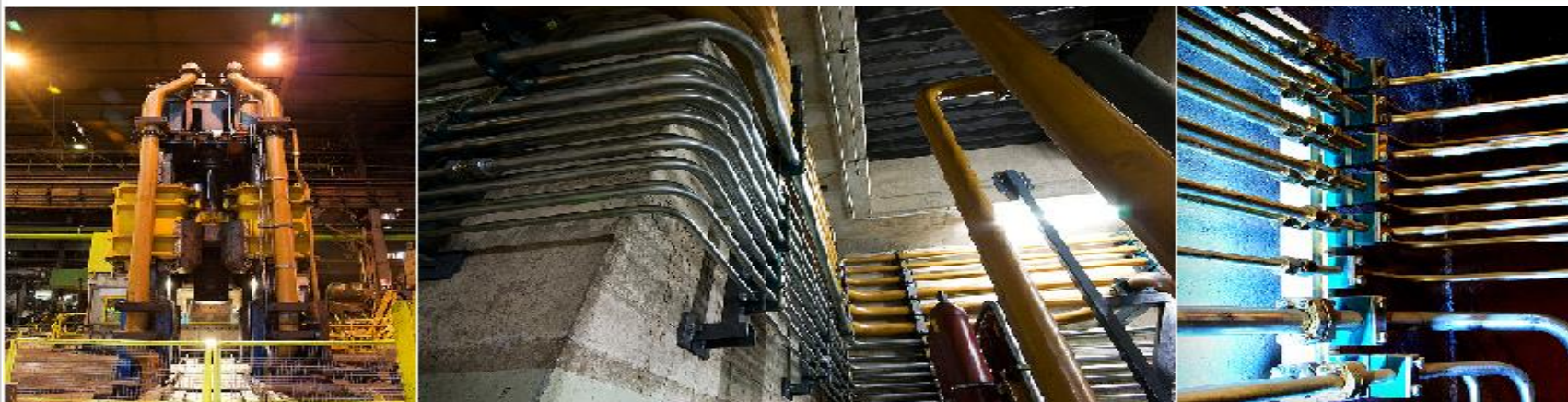
**Non welded high pressure piping solution**

**Бессварные трубопроводы высокого давления**



## Предмет обсуждения

## Subject of the presentation



**Гидравлическая и прочая обвязка оборудования:**

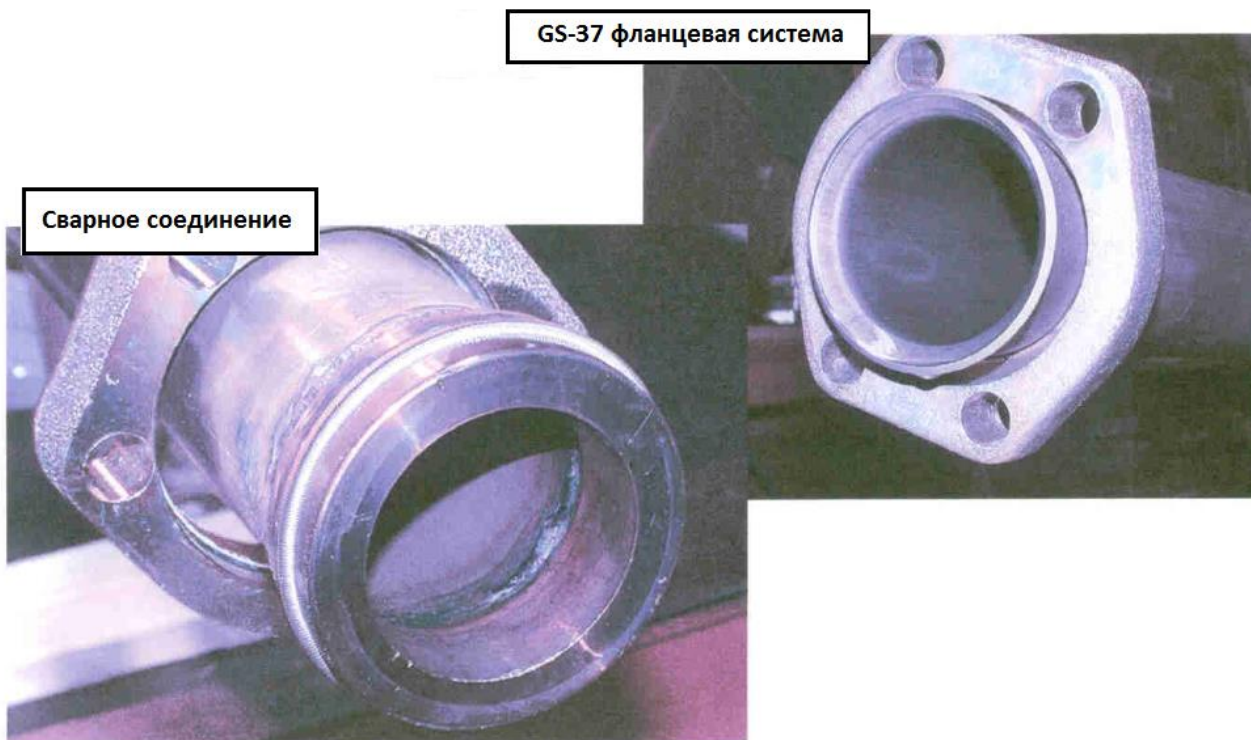
- Q с рабочим давлением от 40 до 690 бар
- Q наружным диаметром от 6 до 609 мм

**Hydraulic pipes and other machines piping with:**

- Q working pressure 40 – 690 bar
- Q O.D. 6 – 609 mm.

**Надежный трубопровод вовремя.  
Почему это не так просто?**

**Reliable piping in time  
Why it's not so easy?**

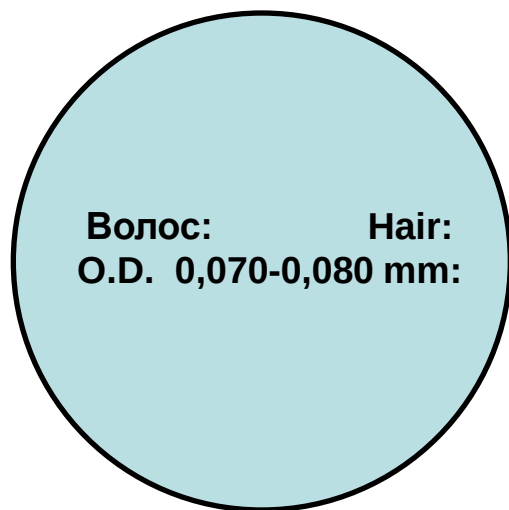


**Надежный трубопровод вовремя.  
Почему это не так просто?**

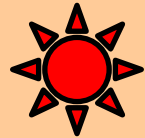
**Reliable piping in time  
Why it's not so easy?**

**Необходим высокий уровень чистоты**

**High cleanliness grade is necessary**



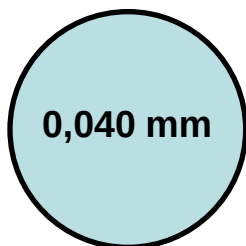
**Частицы размером: Particles with size:**

**от 0,005 mm до 0,020 mm**

**МОГУТ БЫТЬ ПРИЧИНОЙ ПОЛОМКИ  
ГИДРАВЛИКИ  
DAMAGE THE HYDRAULIC SYSTEM**

**Можно разглядеть:  
Possible to see:**



## Преимущества бессварных технологий

## Value proposition of non-welded piping solutions



- Q Легкий и быстрый монтаж
- Q Отсутствие «горячих» работ
- Q Быстрое обучение персонала
- Q Высокий уровень чистоты
- Q Не требуется рентген контроль
- Q Широкий выбор материалов
- Q Ремонтопригодность
- Q Безопасно для окружающей среды

ПРОСТО, НАДЕЖНО, БЕЗОПАСНО

- Q Fast, easy and flexible to install
- Q No hot operations
- Q Fast fitter training
- Q Superior cleanliness
- Q No X-Ray test
- Q Suitable for all different materials
- Q Repair ability
- Q Environmentally friendly

SIMPLE, RELIABLE, SAFE

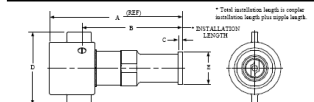


# Проект от GS-Hydro Исходные данные

# GS-Hydro engineering Initial information

- 🕒 Гидравлическая схема / PI-diagram
  - 🕒 Чертежи объекта / Layout drawings
  - 🕒 План помещений / TOP/Section views
  - 🕒 Данные оборудования/ Equip.datasheets
- 
- 🕒 3D модель / 3D model

RTV SERIES CODE 41 FLANGE HEAD COUPLERS & NIPPLES



| Coupler Part Number | Coupler Part Size | Flange Part Number | Flange Part Size | A   | B   | C   | D   | E   | F   | G   | H   | I   | J   | K   | L   | M   | N   | O   | P   | Q   | R   | S   | T   | U   | V   | W   | X   | Y   | Z   |
|---------------------|-------------------|--------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| RTV-41-100          | 100               | RTV-41-100         | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
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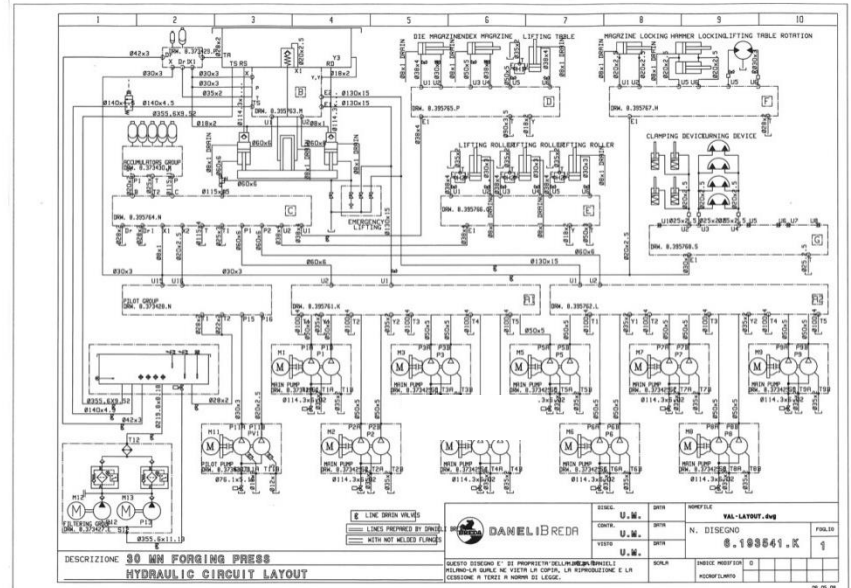
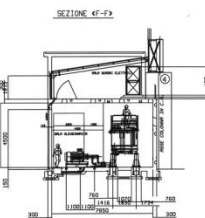
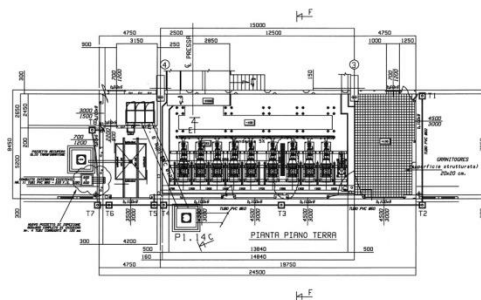
1/2 in. assembly when RTV type coupling below includes GAE 711 (Jaw 10) Code 41 or 42 (for high light range press, the coupling working pressure should not exceed the lower of the rated value or rated value).



| Nipple<br>Dash<br>Size | Nipple Part<br>Number | Flange<br>Dash<br>Size | A     | B    | C    | D    | W in<br>Lbs. | Working<br>Pressure<br>Max. PSI | Door Cap<br>Part<br>Number |
|------------------------|-----------------------|------------------------|-------|------|------|------|--------------|---------------------------------|----------------------------|
| 12                     | RTV-20-FLR12          | 12                     | 6.96  | 1.75 | 3.67 | 1.76 |              | 3,000                           | RTV-20-CA12                |
| 16                     | RTV-20-FLR16          | 16                     | 7.50  | 2.25 | 3.12 | 1.75 | 3.68         | 3,000                           | RTV-20-CA16                |
| 20                     | RTV-20-FLR20          | 20                     | 8.25  | 2.62 | 3.12 | 1.75 | 3.68         | 3,000                           | RTV-20-CA20                |
| 24                     | RTV-20-FLR24          | 24                     | 8.67  | 3.25 | 3.12 | 1.75 | 3.68         | 3,000                           | RTV-20-CA24                |
| 32                     | RTV-20-FLR32          | 32                     | 10.68 | 4.00 | 3.75 | 2.81 | 5.12         | 3,000                           | RTV-20-CA32                |
| 40                     | RTV-20-FLR40          | 40                     | 12.80 | 4.25 | 3.75 | 2.81 | 26.25        | 2,000                           | RTV-20-CA40                |
| 48                     | RTV-20-FLR48          | 48                     |       |      |      |      |              | 2,000                           | RTV-20-CA48                |

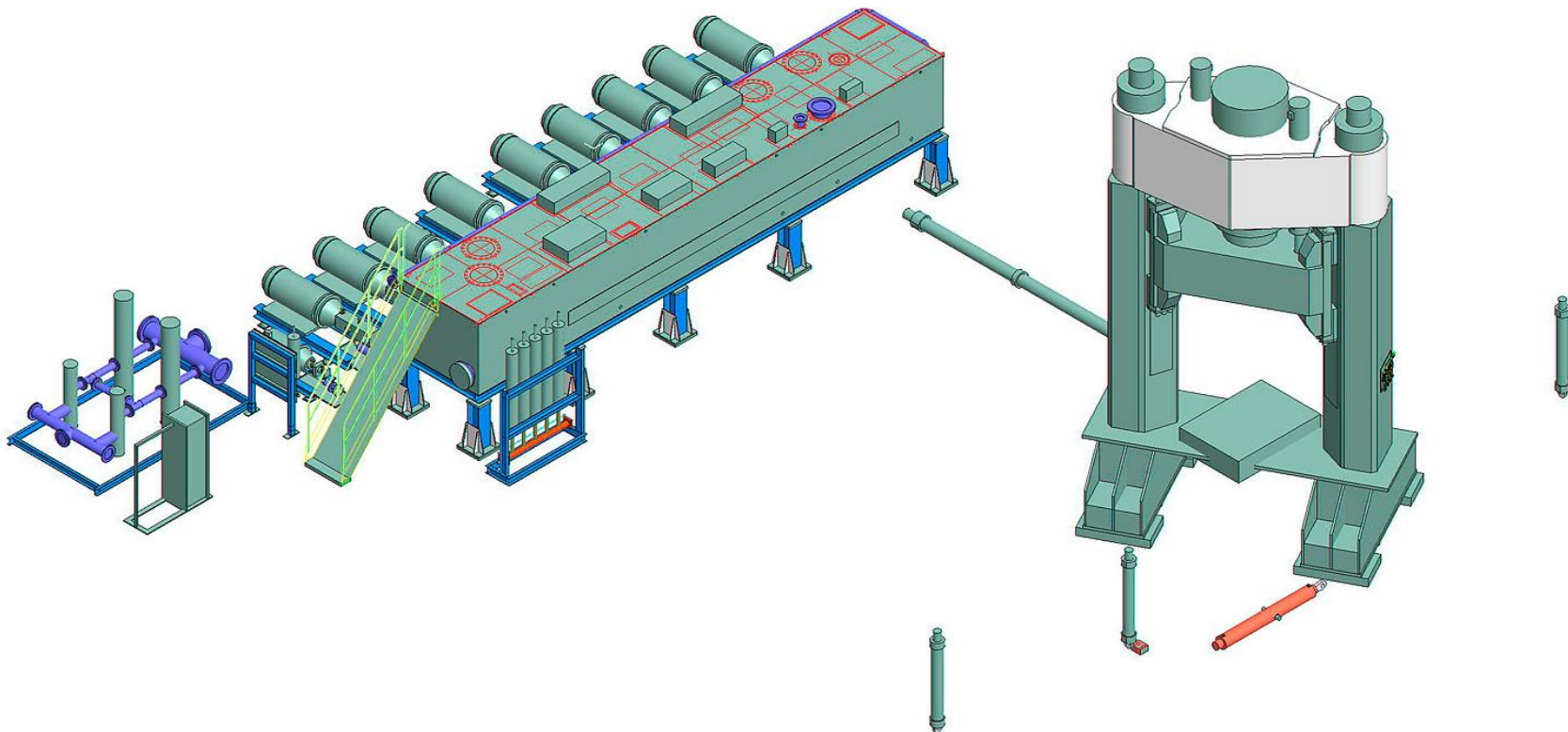
RTV COUPLING  
DUST CAP  
Door caps set with  
nipples specified.

RTV COUPLING PORT DUST CAP Dust cap not included unless specified.



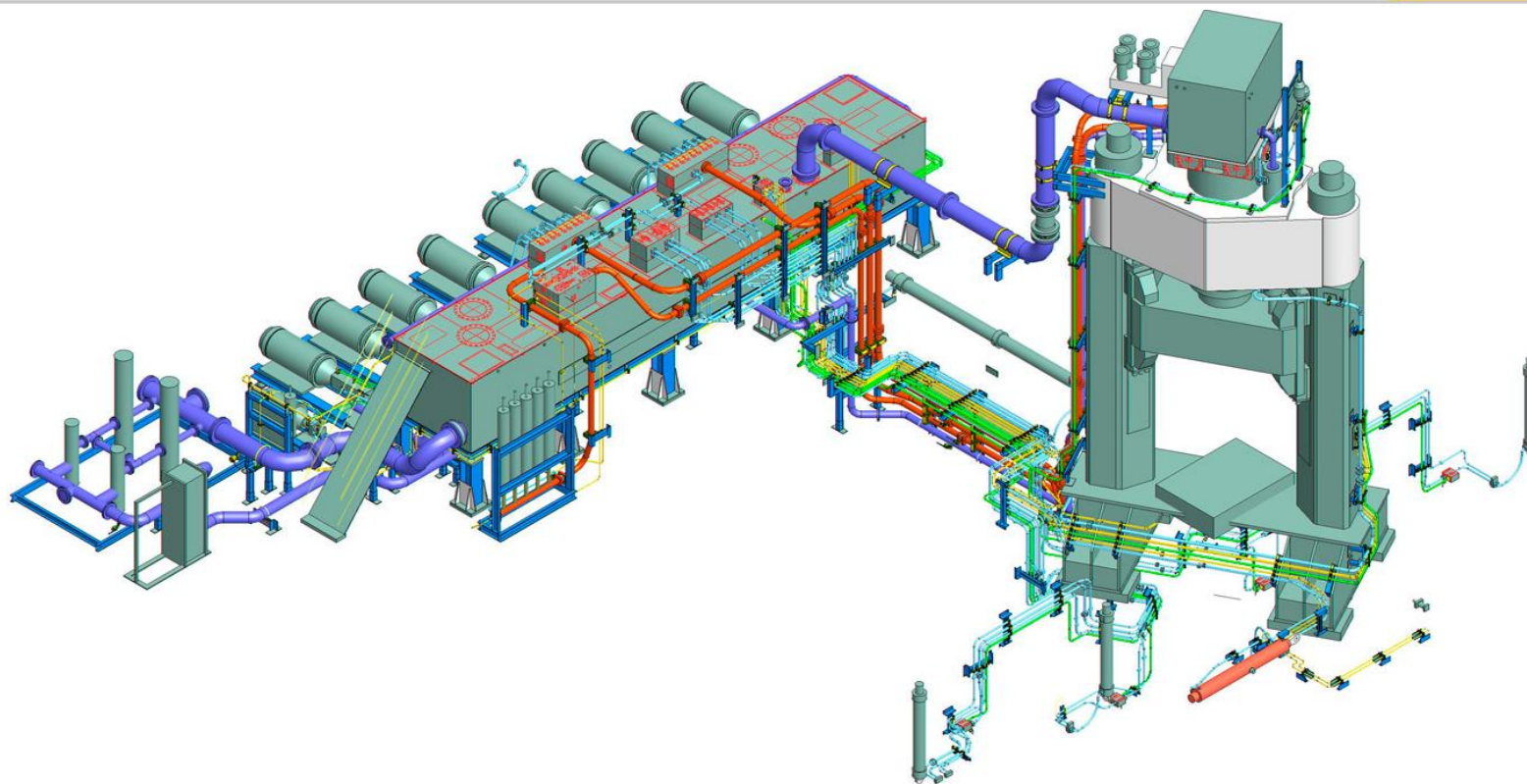
## Проект от GS-Hydro 3D модель системы

## GS-Hydro engineering 3D model of the system



## Проект от GS-Hydro 3D модель системы

## GS-Hydro engineering 3D model of the system



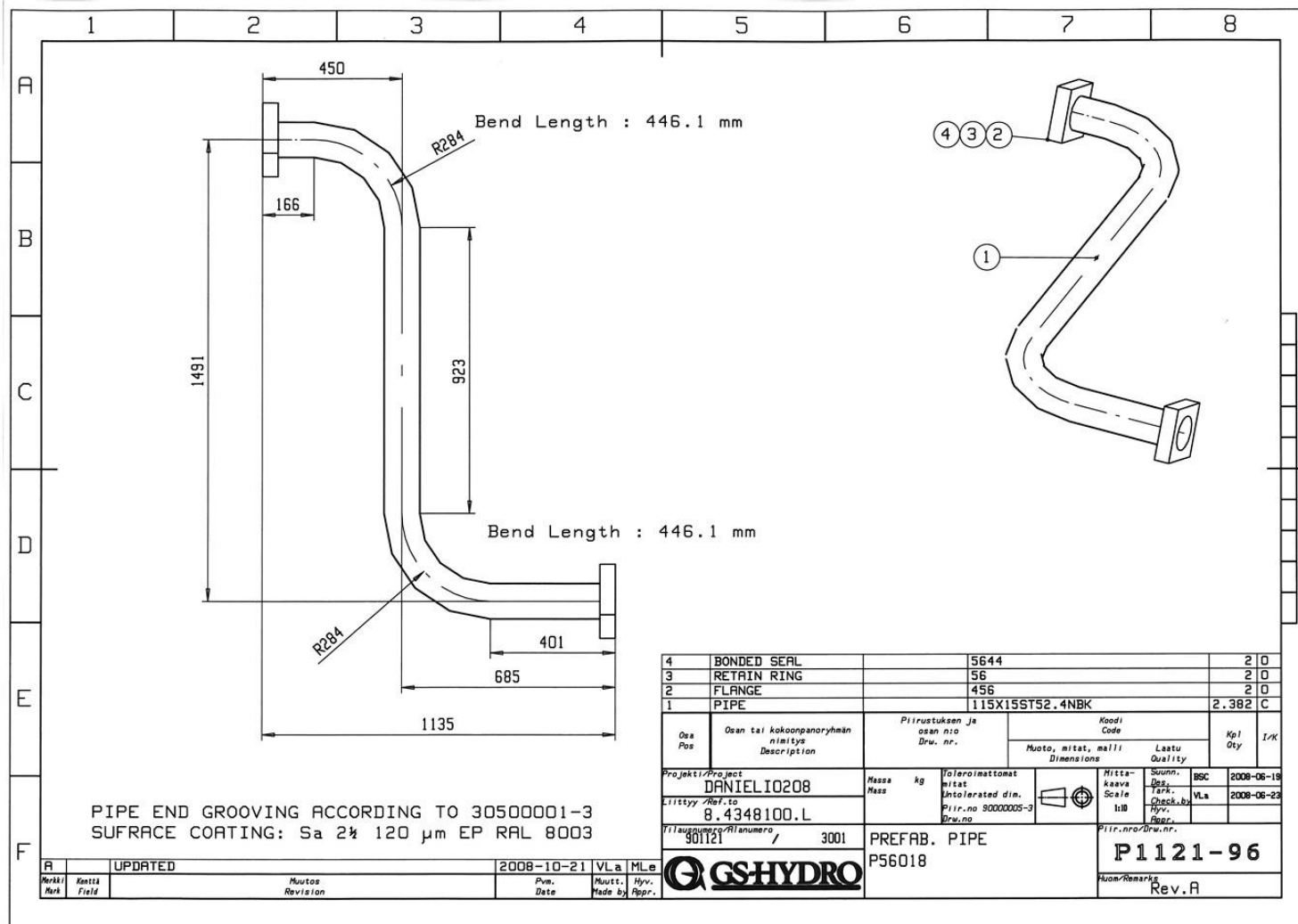
- ☞ Дает полное представление общего вида / Gives a natural view of the piping system
- ☞ Позволяет заметить ошибки / Makes collision viewing possible
- ☞ Оперативная корректировка чертежей / Fast updating of drawings

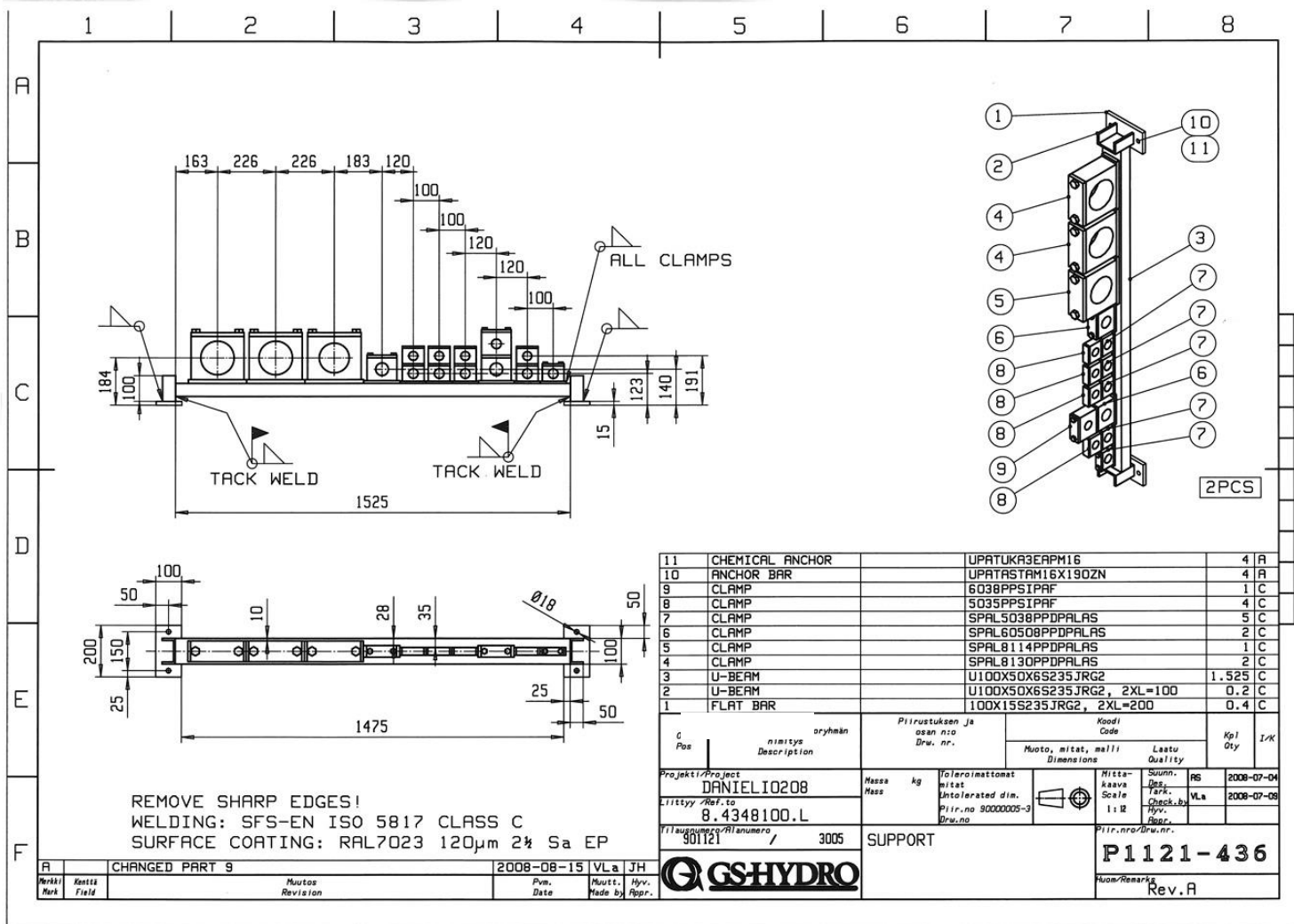
# Проект от GS-Hydro

## Чертежи для производства

# GS-Hydro engineering

## Prefabrication drawings





## GS-Hydro engineering Assembly drawings

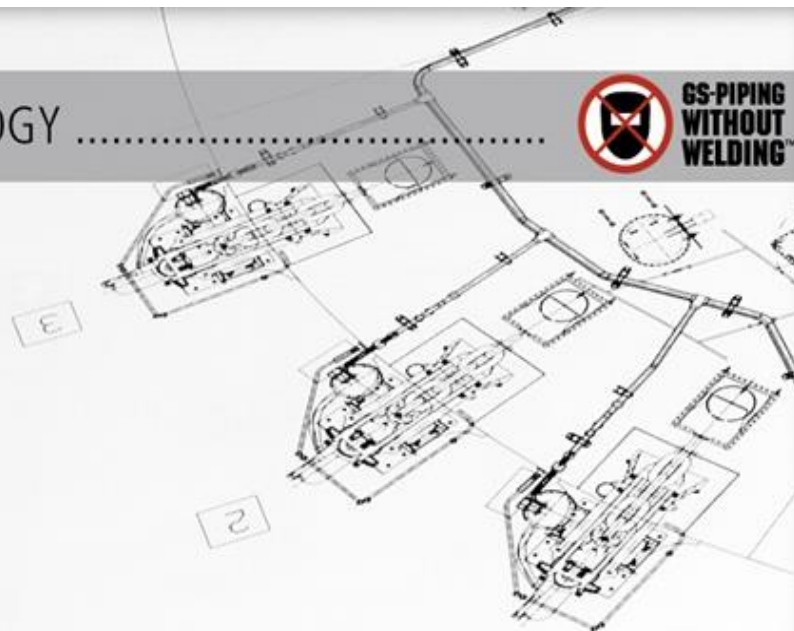
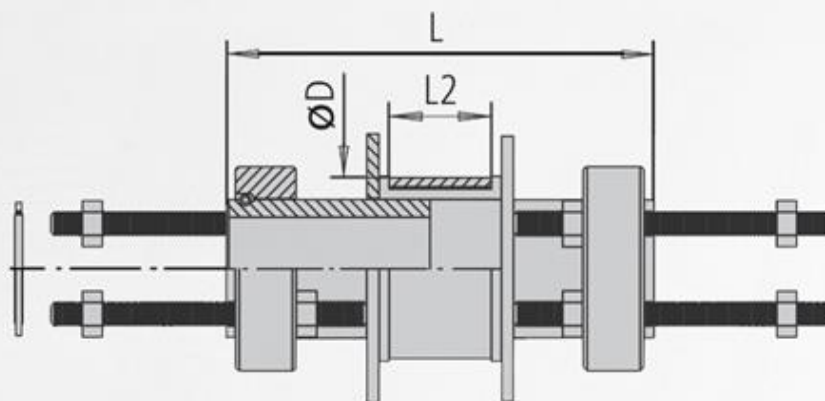




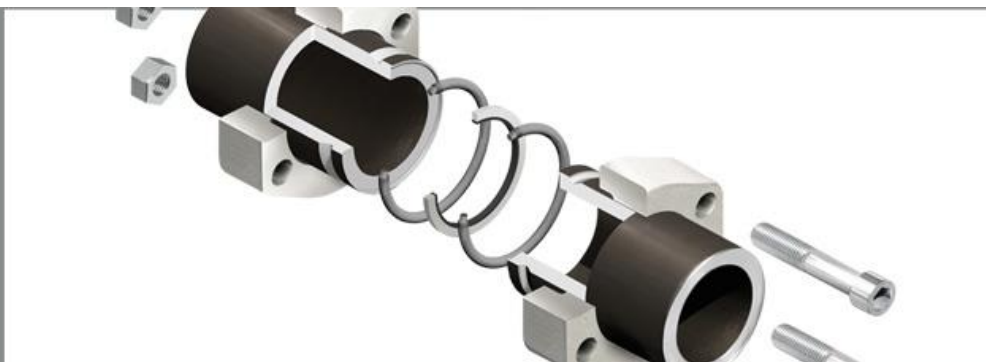
## GS-HYDRO NON-WELDED TECHNOLOGY .....



**GS-PIPING  
WITHOUT  
WELDING™**



10  
000 psi  
690 bar



26 < to < 356

### GS- фланцевое соединение с упорным кольцом

... применяется

- при рабочем давлении до 10 000 psi (690 Бар)
- на трубах внешним диаметром от 26 до 356 мм.

### GS-Retain Ring System

...for both high and low pressure applications  
with:

- max. working pressures as high as 10 000 psi (690 bar)
- pipe diameters between 26 and 356 mm.

6000 psi  
420 bar



16 < to <273

### GS-37° Фланцевое соединение

... применяется:

- при рабочем давлении 3000-5000/6000 psi (210-350/420 Bar)
- на трубах диаметром до 90 мм.

а также:

- при рабочем давлении 50 Бар
- на трубах внешним диаметром 50 – 273 мм.

### GS-37° Flare Flange System

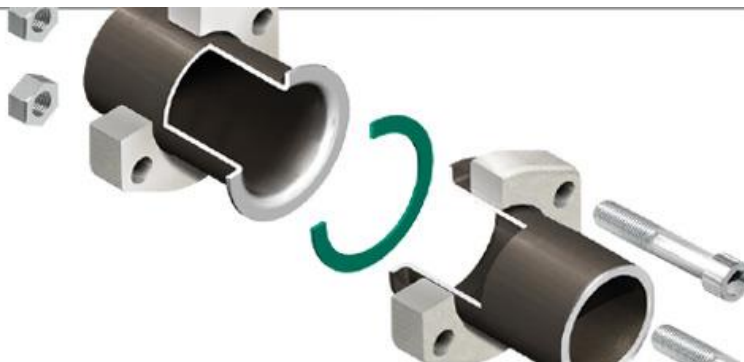
...for high pressure applications with:

- working pressure as high as 3000-5000/6000 psi (210-350/420 bar)
- pipe diameters up to 90 mm

and for intermediate pressure applications with:

- working pressures as high as 50 bar
- pipe diameters between 50 - 273 mm

580  
psi  
40  
bar



16 < to <608

### GS-90° Фланцевое соединение

...применяется:

- при рабочем давлении 10 – 40 Бар
- на трубах внешним диаметром до 608 мм

### GS-90° Flare Flange System

...for low pressure applications with:

- working pressures between 10 - 40 bar
- pipe diameters as large as 608 mm

Трубопровод под ключ от GS-Hydro  
Производство

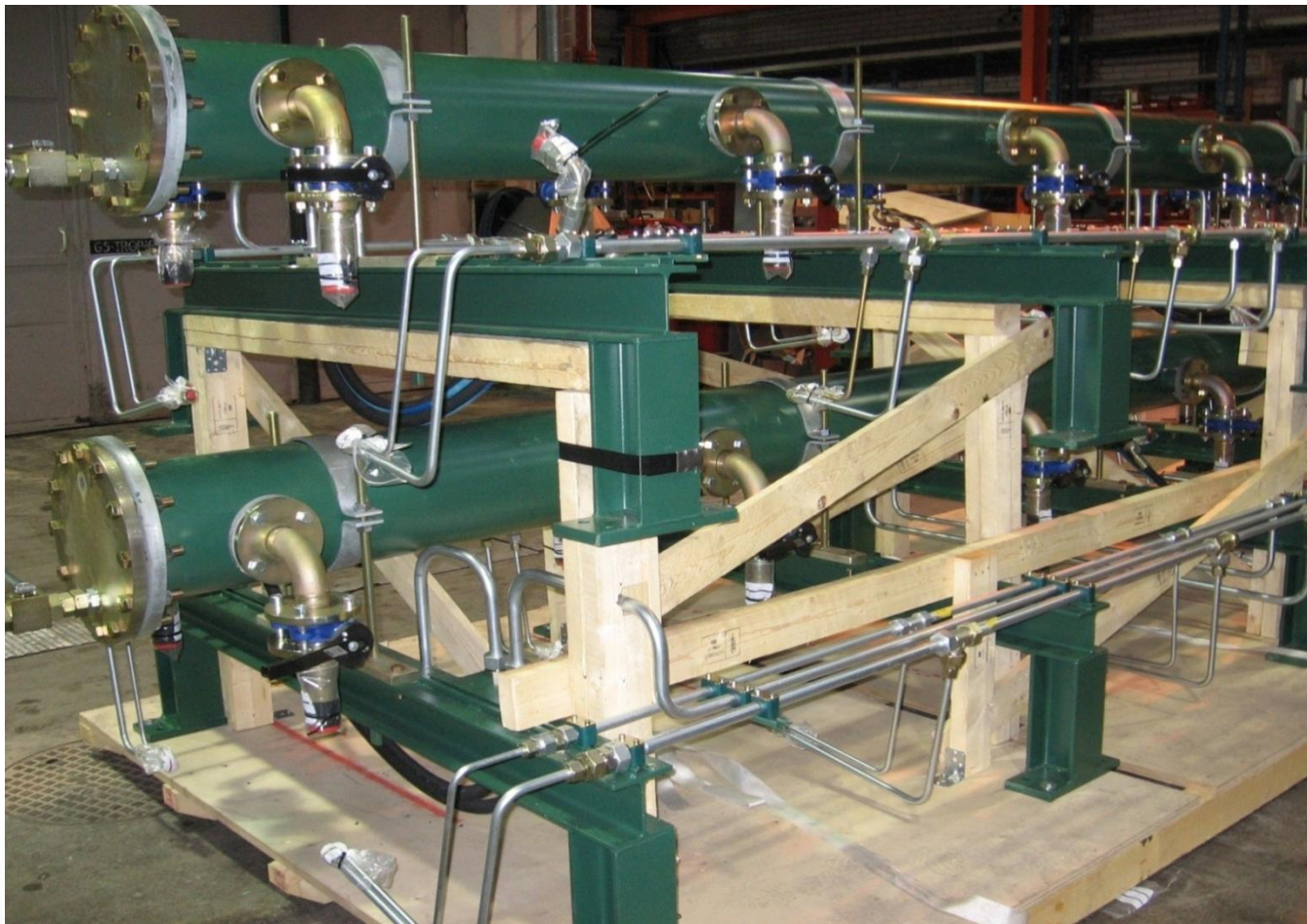
GS-Hydro piping turn key solution  
Prefabrication



  
**GS-Hydro**  
Creating Value Together

Трубопровод под ключ от GS-Hydro  
Производство

GS-Hydro piping turn key solution  
Prefabrication



  
**GS-Hydro**  
Creating Value Together

# Трубопровод под ключ от GS-Hydro Документация

# GS-Hydro piping turn key solution Documentation

🕒 Чертежи, спецификации, сертификаты, инструкции, протоколы испытаний и т.д.

🕒 Drawings, material certificates, certificates of classification authorities, assembly instructions etc.

