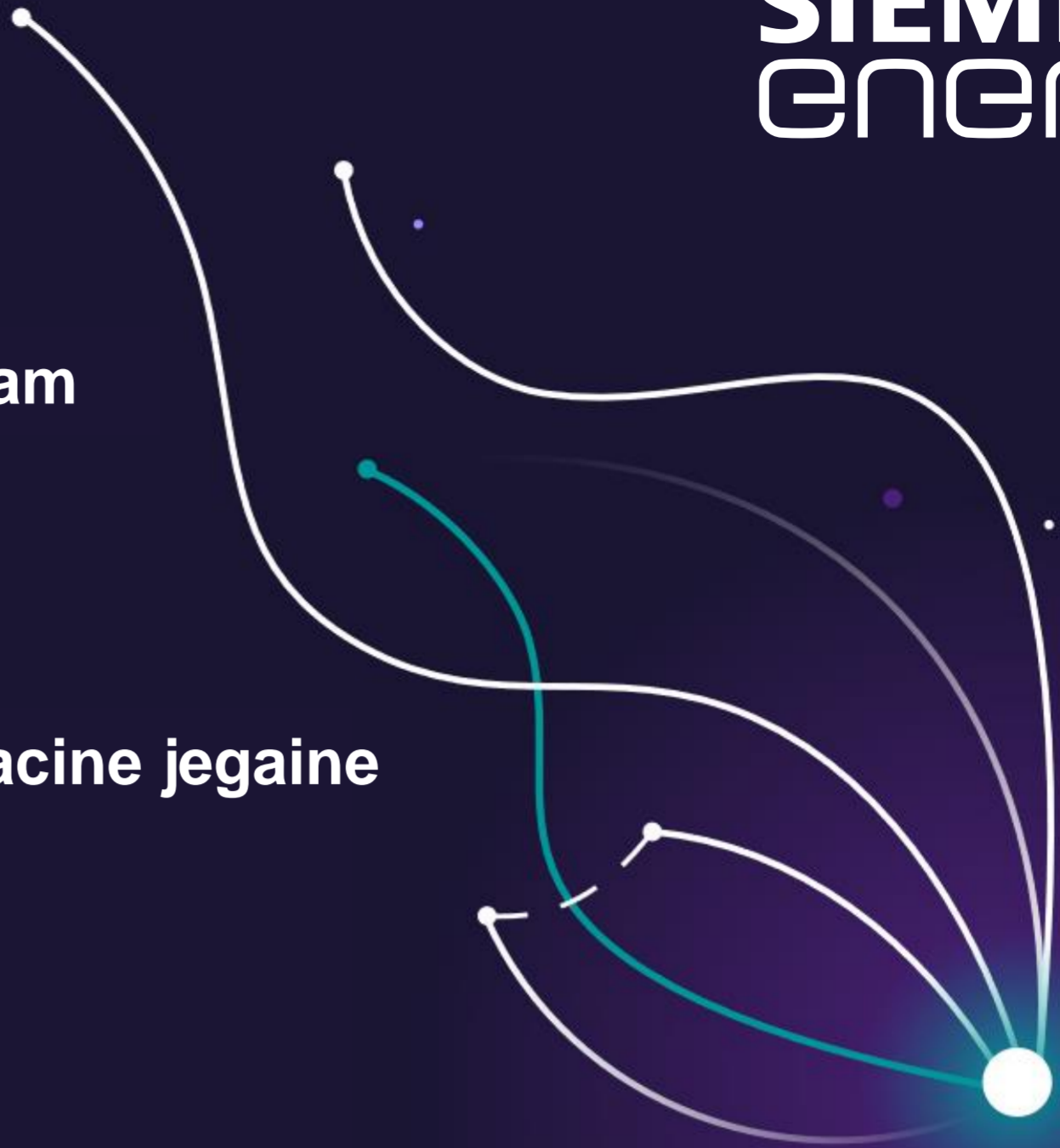


Spare Parts Concept

for steam turbine maintenance program

Customer: Kauno kogeneracine jegaine
Site name: Kaunas
Serial number: 6051
Unit type: SST-300
Power: 26 MW



Categorization of Spare Parts

Necessary and consumables: (Open & close) parts necessary for the disassembly/assembly of equipment elements within the given overhaul/repair. These parts are always getting changed regardless of their condition.



Highly recommended: (Wear & Tear preferential) parts that are subject to continuous wear and where the damage occurs until the next scheduled overhaul based on the experience of manufacturer's specialists.



Recommended: (Wear & Tear) parts that are subject to continuous wear and getting used in case of necessity of their replacement.



Strategic: (Emergency back-up) parts that could cause long downtimes of the equipment due to long delivery time or their repair, if damaged.



Important!

Below mentioned sketches are demonstrative only and may not reflect factual construction of installed unit. For exact list of each spare parts category please contact Siemens Energy Marketing & Sales dpt.

Turbine section

Necessary and consumables

Highly recommended

Recommended

Strategic

- 1 Sealing rings
- 16 Sealing rings
- 17 Sealing rings

- Bearings -Set of carbon brushes
- Temperature sensor

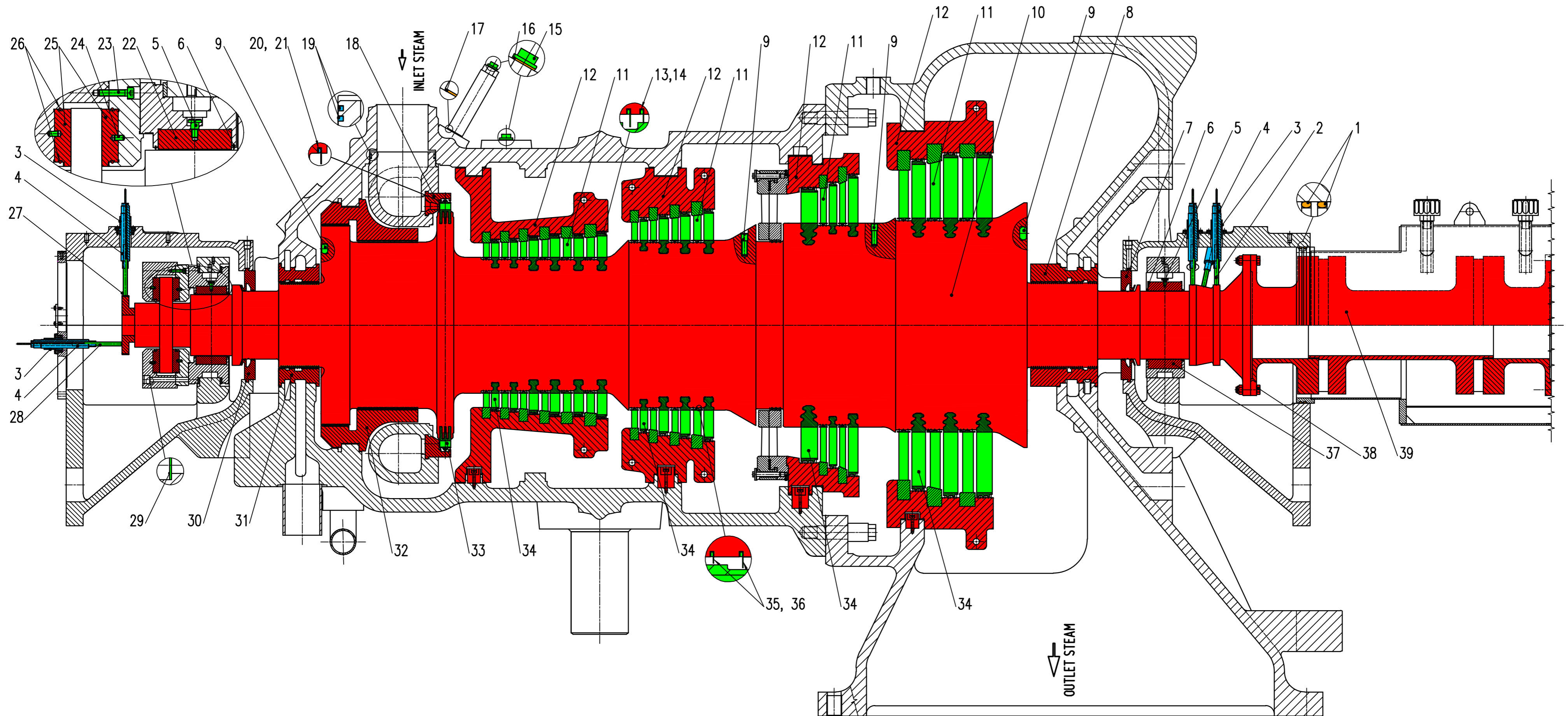
- 3 Bushing for sleeve
- 4 Sleeve for sensors
- 19 Piston rings
- 20 Labyrinth sheets
- 21 Calking wire

- Connecting parts of parting joint
- Turbine housing -Bolt screws
- Taper pins with external thread
- Nuts
- Washers
- Exhaust casing -Bolt screws
- Taper pins with external thread
- Nuts
- Washers
- Steam sealings -Screws
- Slotted pan head screws with large head
- Blade carriers -Bolt screws
- Taper pins with external thread
- Nuts
- Washers
- Inner casing -Bolt screws
- Nuts
- Washers
- I&C (Instrumentation & Control)
- Reductions
- Metal hoses
- Plug screws
- Temperature transmitter
- Control system cards

- 2 Vibration/motion sensors
- 5 Slotted pan head screws with shoulder
- 6 Labyrinth sheets
- 9 Balancing weights
- 11 Guide blades
- 13 Labyrinth sheets
- 14 Calking wire
- 15 Plug screws
- 23 Screws
- 24 Pins
- 27 Speed sensors
- 28 Axial motion sensor
- 29 Lock washers
- 33 Moving blades (Control stage)
- 34 Moving blades
- 35 Labyrinth sheets
- 36 Calking wire

- Connecting parts of parting joint
- Thrust bearing -Screws
- Washers
- Steam sealings -Labyrinth sheets
- Calking wire
- Bearing pedestal -Bolt screws
- Taper pins with external thread
- Nuts
- Washers

- 7 Rear oil seal ring
- 8 Rear steam sealing with fixation segments
- 10 Rotor with blades, lab. sheets and balancing weights
- Transport container for rotor
- 12 Blade carriers with guide blades, lab. sheets and fixation segments
- 18 Nozzle segment with blades and labyrinth sheets
- 22 Bearing segments for radial bearing
- 25 Bearing segments for axial bearing
- 26 Wires
- 30 Front oil seal ring
- 31 Front steam sealing with fixation segments
- 32 Steam sealing balance piston with fixation segments
- 37 Bearing segments for radial bearing
- 38 Fasteners for coupling
- 39 Coupling



Emergency stop valve with actuator

Necessary and consumables

- 19 Sealing ring
- 22 Set of seals
- 23 Set of seals
- 25 Sealing ring
- 26 Set of seals
- 27 Guide ring
- 28 Slide ring seal
- 29 Guide ring
- 30 Sealing ring
- 31 Sealing ring
- 32 Sealing ring
- 35 Slide ring seal
- 36 Wiper ring
- 37 Sealing ring

Highly recommended

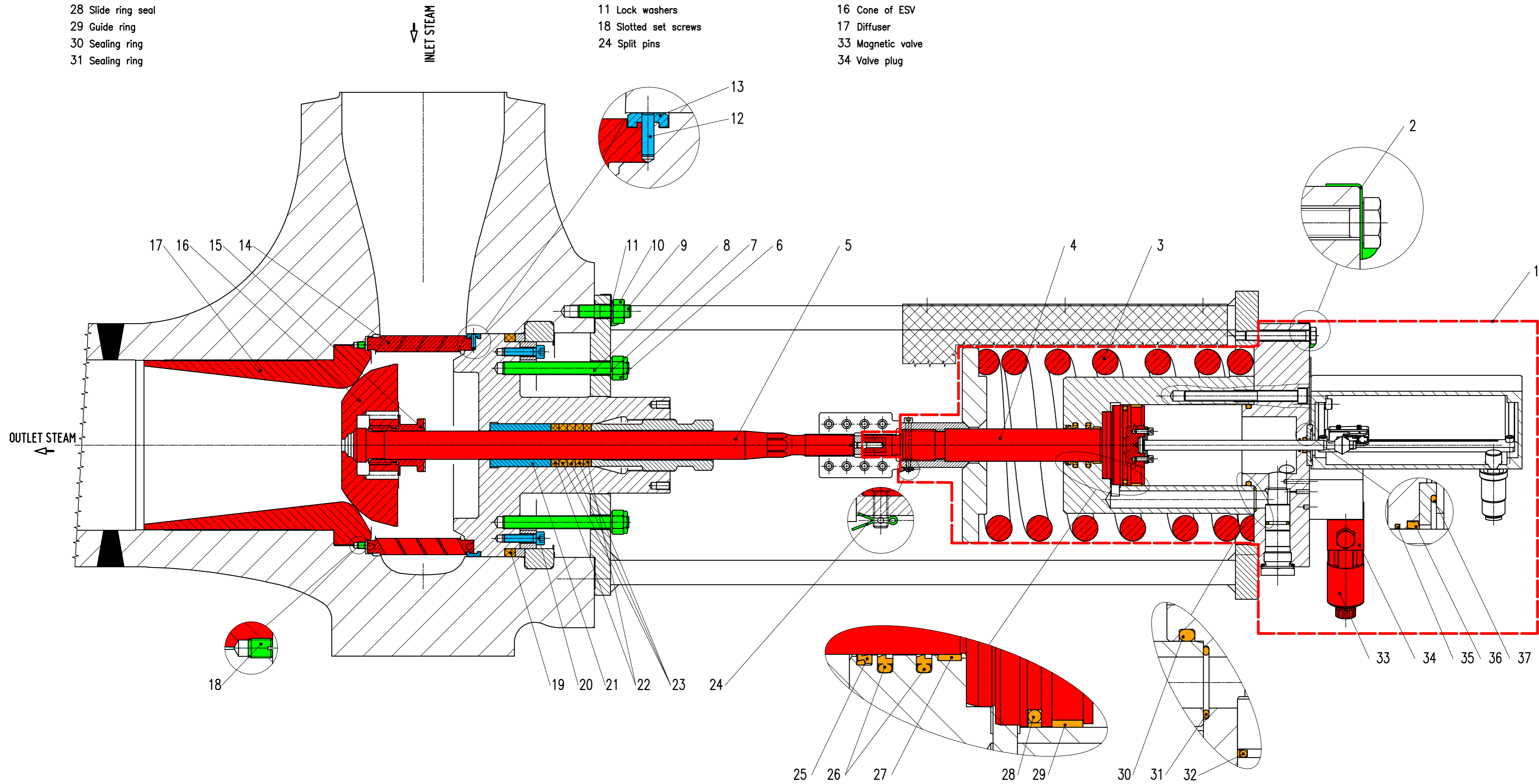
- 12 Pins
- 13 Ring
- 20 Screws
- 21 Sleeve

Recommended

- 2 Lock washers
- 6 Nut NF
- 7 Washers
- 8 Bolt screws
- 9 Bolt screws
- 10 Nuts
- 11 Lock washers
- 18 Slotted set screws
- 24 Split pins

Strategic

- 1 Servomotor
- 3 Compression spring
- 4 Piston rod
- 5 Valve spindle
- 14 Steam strainer
- 15 Sleeve
- 16 Cone of ESV
- 17 Diffuser
- 33 Magnetic valve
- 34 Valve plug



Control valve with servomotor

- Necessary and consumables**
- 4 Set of seals
 - 5 Set of seals
 - 6 Sealing ring
 - 10 Felt gasket
 - 11 Sealing ring
 - 13 Slide ring seal
 - 14 Piston gasket
 - 15 Slide ring seal
 - 16 Guide ring
 - 17 Sealing ring
 - 18 Guide ring
 - 19 Slide ring seal
 - 21 Sealing ring
 - 28 Sealing ring
 - 30 Guide rings
 - 31 Piston gaskets
 - 32 Sealing rings
 - 36 Flat sealing ring
 - 39 Flat sealing rings

- Highly recommended**
- 3 Sleeve
 - 8 Piston rod
 - 9 Compression spring
 - 12 Sleeve
 - 24 Position transmitter
 - 26 Transfer solenoid valve
 - 29 Piston
 - 34 Nuts TF
 - 35 Screws HS

- Recommended**
- 7 Screws
 - 20 Retaining ring
 - 22 Washers
 - 23 Screws
 - 27 Lock washers
 - 33 Lock washers
 - 37 Pins
 - 38 Plug screws

- Strategic**
- 1 Diffuser
 - 2 Valve spindle
 - 25 Servomotor

