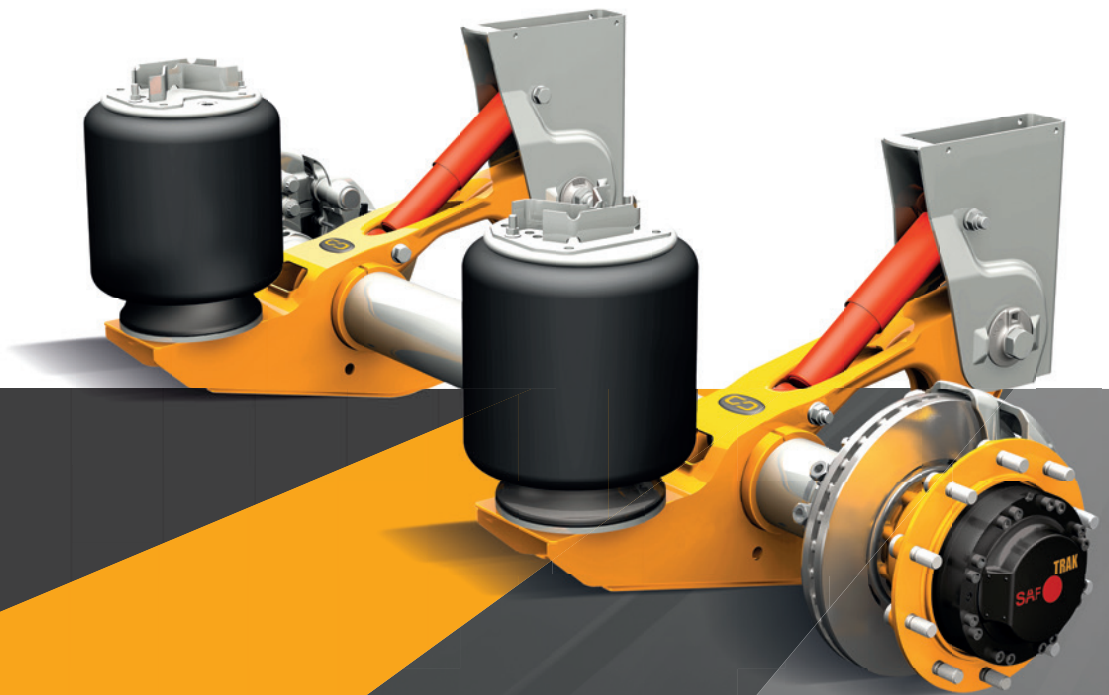


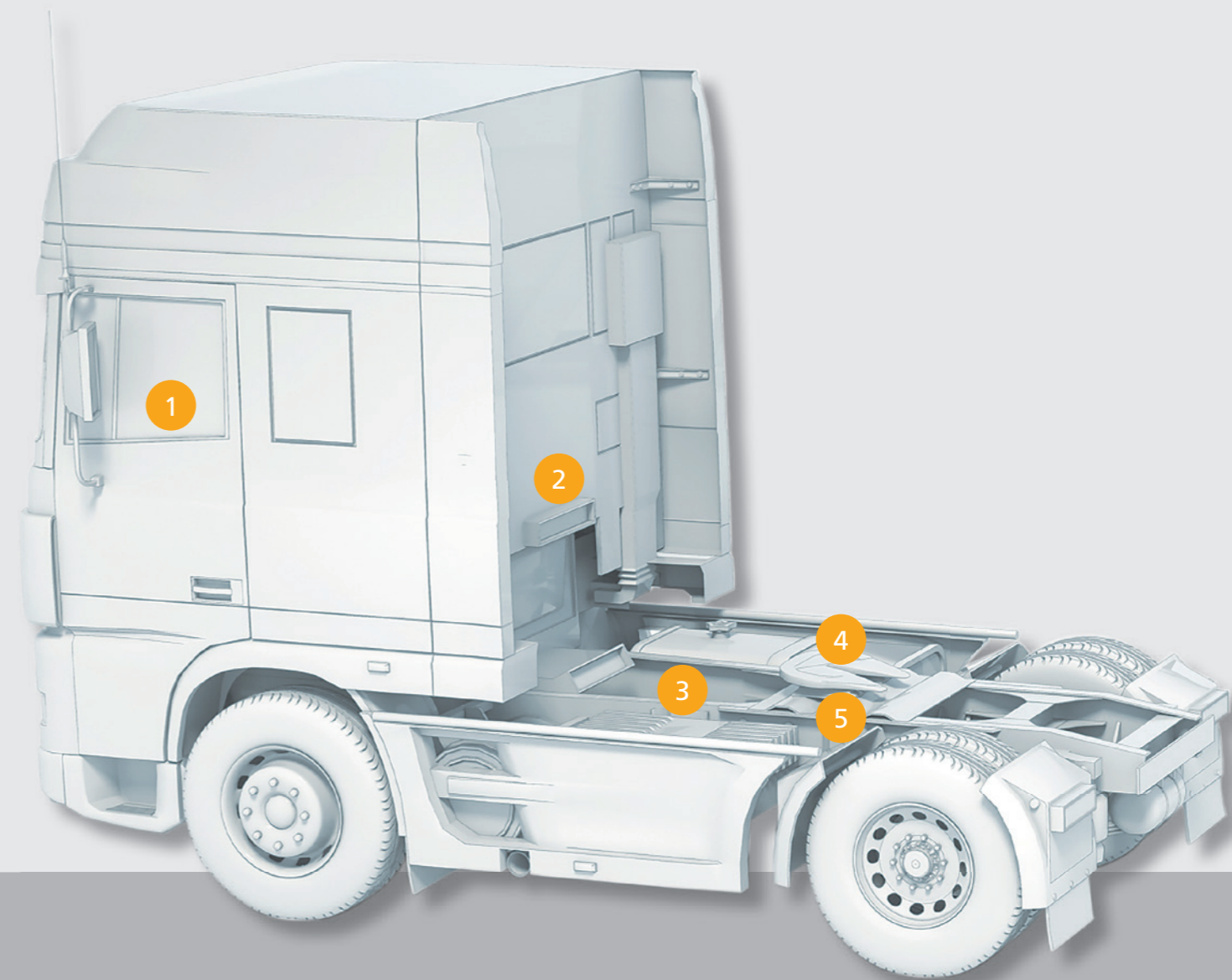
SAF INTRA CD TRAK

Recommendation for the technical equipment of the tractor



- 1 Rocker switch with control light warning lamp
- 2 CAN BUS / Body Builder Module
- 3 Power take off / hydraulic pump
- 4 2-line hydraulic system
- 5 Tipping valve

Please also refer to our installation instructions:
safholland.com - downloads - installation instructions: SAF INTRA CD TRAK



HYDRAULIC PUMP / POWER TAKE OFF

The hydraulic pressure and available volume are the parameters governing the performance of the system, dependently of the pump selected, power take off transmission and truck engine speed. The system is designed for a maximum of up to 200 l/min.

HYDRAULIC PUMP

- **Pressure** 350 bar constant use (recommended) – 250 bar (min. recommendation)
- **Displacement** We recommend a calculation by SAF-HOLLAND

POWER TAKE OFF

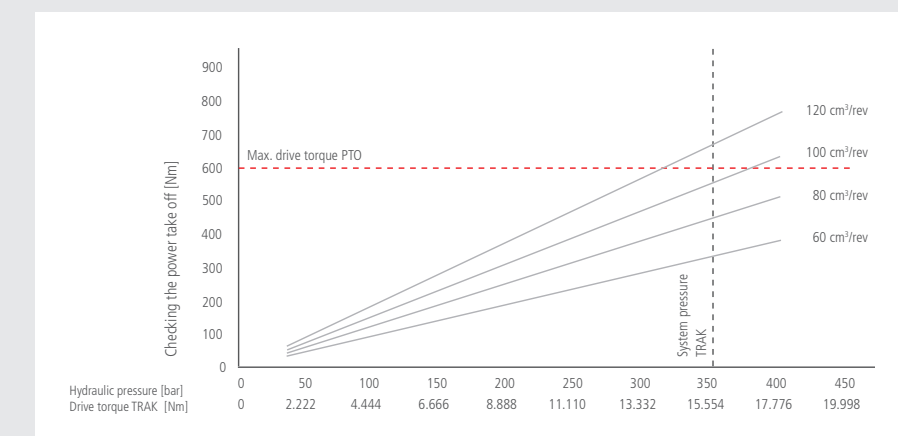
- **Model** Gearbox side or engine side
- **Torque**

REQUIRED TORQUE POWER TAKE OFF

PRESSURE	bar	ccm/rev	DISPLACEMENT	
			81	101
	250		321 Nm	401 Nm
	350		450 Nm	561 Nm

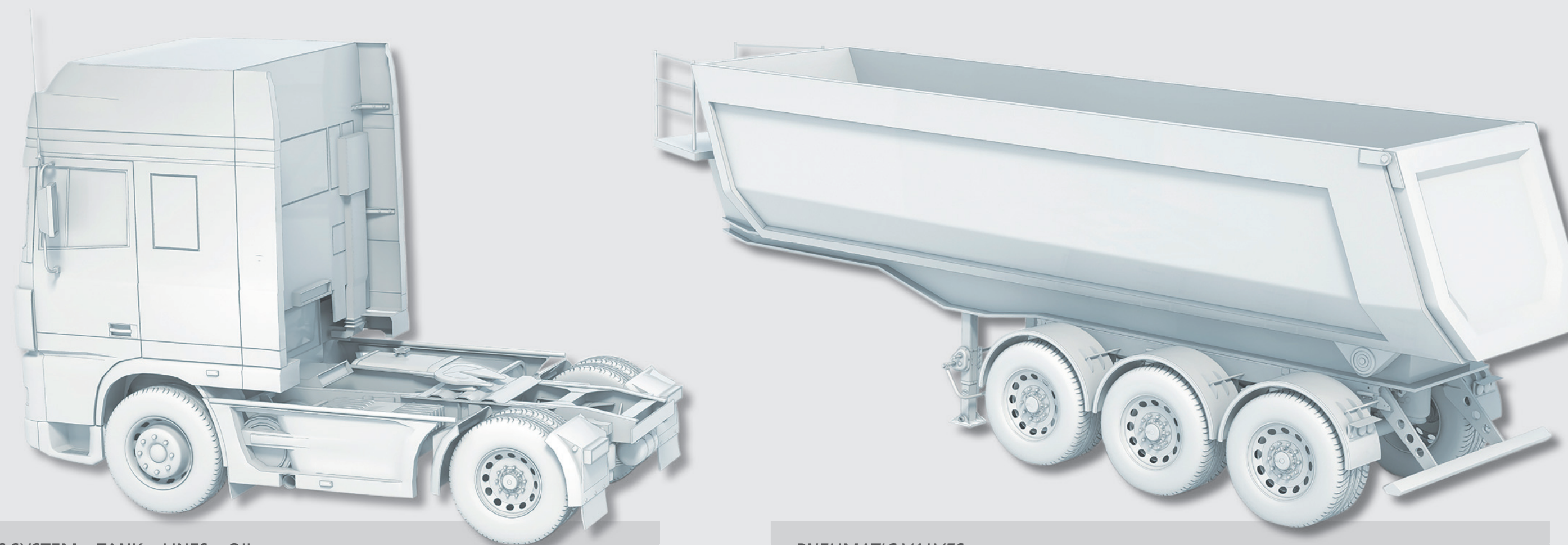
- **Output** Maximum permissible output values must not be exceeded. (See manufacturer's specifications)

CHECKING POWER TAKE OFF (example for max. torque 600 Nm)



For optimal system performance, we recommend a calculation by SAF-HOLLAND in advance.

The SAF INTRA CD TRAK must be operated in accordance with the manufacturer's instructions for the use of the power take off and hydraulic pump.



HYDRAULIC SYSTEM – TANK – LINES – OIL

Pressure and return flow connector (2-line hydraulics)

- **Tank** Max. volume tipping cylinder + 50 l (Recommendation: min. 180 l oil – the more oil, the better the oil cooling)
- **Return flow filter** With filter rating $\beta \leq 25 \mu\text{m}$
- **Tubes** Inner diameter of pressure line: 20 mm (or greater)
Inner diameter return flow line: 25 mm (or greater)
Compression strength must be complied with
- **Hydraulic coupling** Inner diameter pressure line as tube or greater
Inner diameter return flow line as tube or greater
Compression strength must be complied with
Non-interchangeable connectors for flow and return must be used
- **Hydraulic oil type** HLP according to DIN 51524-2 or HLPD according to DIN 51524-2 or HEES according to ISO 15380 HV according to DIN 51524-3 or HVLP according to DIN 51524-3 or e.g. Class 32 or 46
- **Hydraulic oil viscosity** The viscosity according to DIN 51519 must be 15 - 380 cSt
- **Hydraulic oil purity** 22/18/15 according to ISO 4406 or Class 9 according to NAS 1638

PNEUMATIC VALVES

Two pneumatic valves are needed to control the SAF INTRA CD TRAK.

- 2/2-way air valve (24 V) NW4.0
- Or valve NW4.0

TIPPING VALVE

Two-step tipping valve recommended for

- Low pressure tipping cylinders or when
- SAF INTRA CD TRAK is to be operated at more than 250 bar:

- Tipping valve comparable with Hyva HT 2220 with
 - Pressure step for tipping cylinder (e.g. 150 bar) and
 - Pressure step for SAF INTRA CD TRAK (e.g. 350 bar)
- Use of a non-locking air provider for tipping function

TIPPING VALVE	PRESSURE
Single step	150 bar
Single step	250 bar
Two step	150 bar / 250 bar
Two step	150 bar / 350 bar
Two step	250 bar / 350 bar

Not suitable
↓
optimal

The specifications given here are subject to alteration. The final equipment of the vehicle must be agreed upon by the tractor unit manufacturer, the hydraulics supplier, the vehicle manufacturer and SAF-HOLLAND.

ELECTRIC SYSTEMS

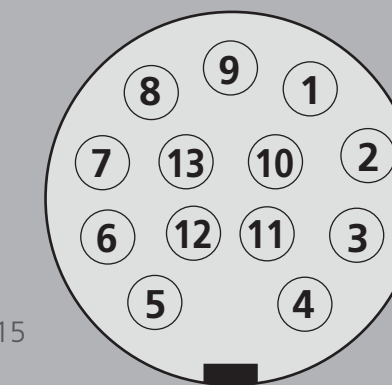
The additional electrical equipment of the tractor unit is needed to control the system safely from the tractor unit.

- **Rocker switch** with 2 switch positions (0 V – OFF / 24 V – ON), 2 x ON / OFF
- **Status lamp** 24 V (green)
- **Error lamp** 24 V (yellow)
- **Body Builder Module** ISO 11898 high-speed-CAN / 5 V base / 250 kBaud must provide the following information:
- **CAN BUS**
 - wheel-based vehicle speed
 - accelerator pedal position
 - brake switch
 - transmission current gear

Please check if the relevant CAN BUS data are available.

Connection of the semitrailer:

- Use of a separate pin connector, 13-PIN-ADR socket
- Cable for CAN signal according to SAE J1939-11 or SAE J1939-15



CONTACT NO.	DESCRIPTION	CROSS SECTION [mm²]
1	CAN_L	
2	CAN_H	
3	Air Valve -	1
4	Air Valve +	1
5	Status Lamp	1
6	Error Lamp	1
7	Reserved for future allocation	
8	Reserved for future allocation	
9	Reserved for future allocation	
10	+24 V via ignition lock	1,5
11	0V return to battery-	1,5
12	Assist Switch	1
13	Reserved for future allocation	1

To include the SAF INTRA CD TRAK in your vehicle authorisation, we recommend prior consultation with your Technical Service.

Engineering Your Road to Success

The SAF-HOLLAND Group is one of the leading international manufacturers of suspension-related assemblies and components for trailers, trucks and buses. Our innovative products increase the efficiency, safety and environmental friendliness of commercial vehicles, contribute to the success of our customers. With around 3,000 employees worldwide, we are at the forefront of shaping the future of the transportation industry.



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