



Industrial Firefighting

High Volume Tank Firefighting Vehicles
for Industrial Firefighting

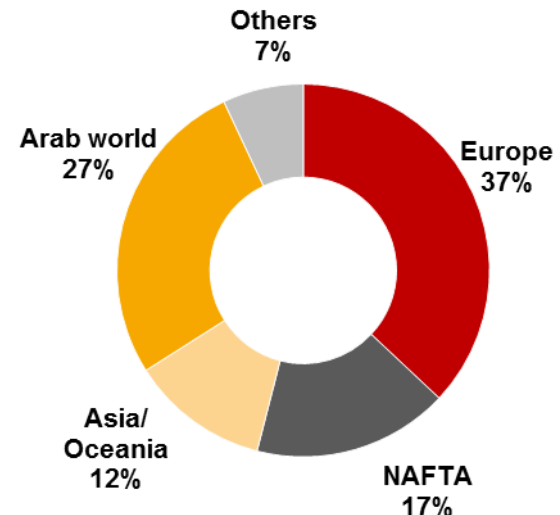
Budapest, 10. – 11. November 2015

 **rosenbauer**

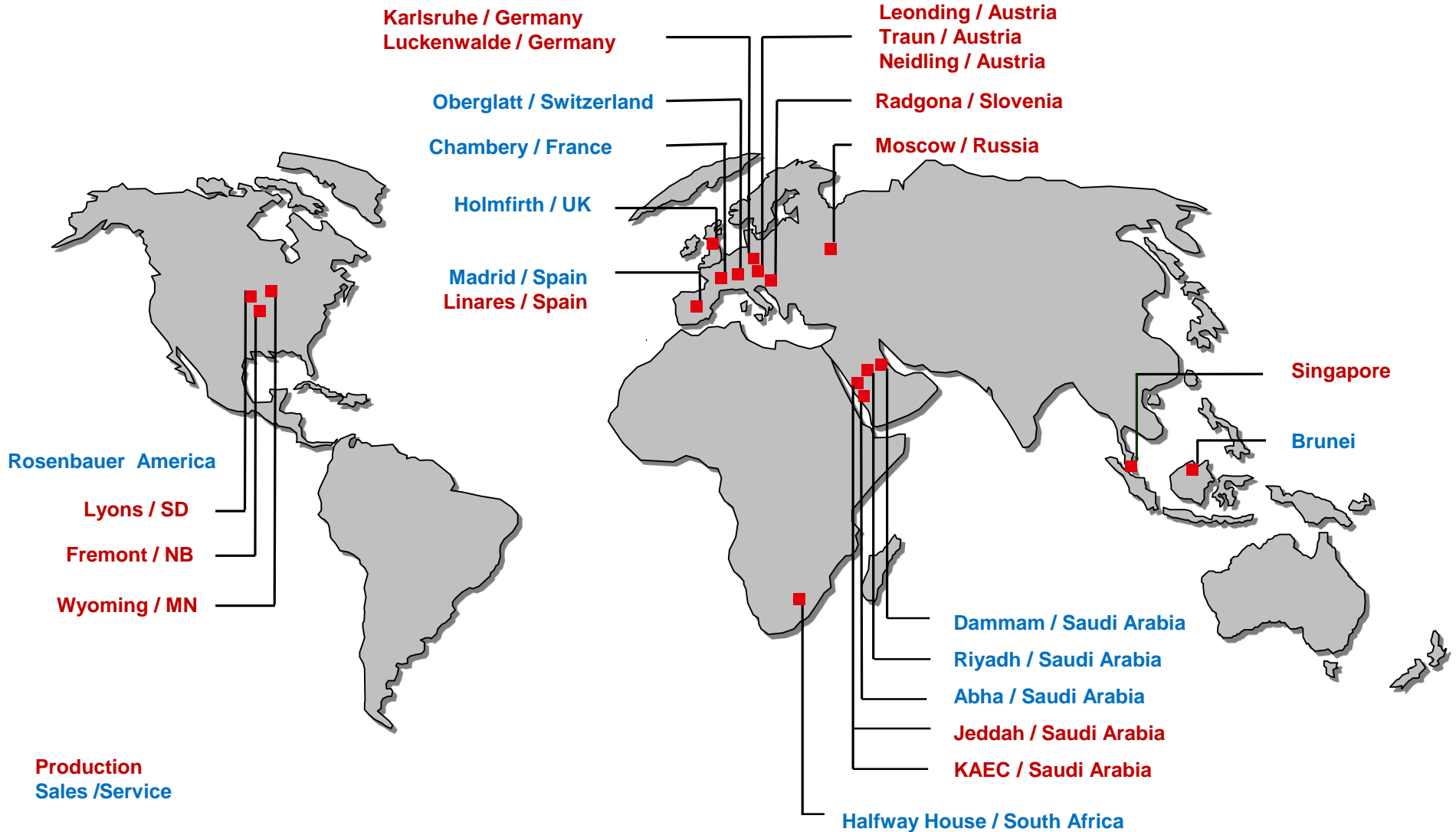
- **Leading manufacturer of firefighting vehicles in the fire protection and civil defense sector**
 - Full-liner – covering any needs of the fire services
 - World's largest exporter of fire fighting vehicles
 - Largest sales and service organization in the fire industry
 - Production according to DIN and NFPA (US) standards with production facilities in Europe, North America and Asia
 - Industry leader in technology and innovation

- **Rosenbauer Group in 2014**

- Revenue € 784.9 million
- EBIT € 48.4 million
- Headcount 2.941 employees
- **Shipments to 133 countries (2013: 114 countries)**



Production facilities, sales and service companies

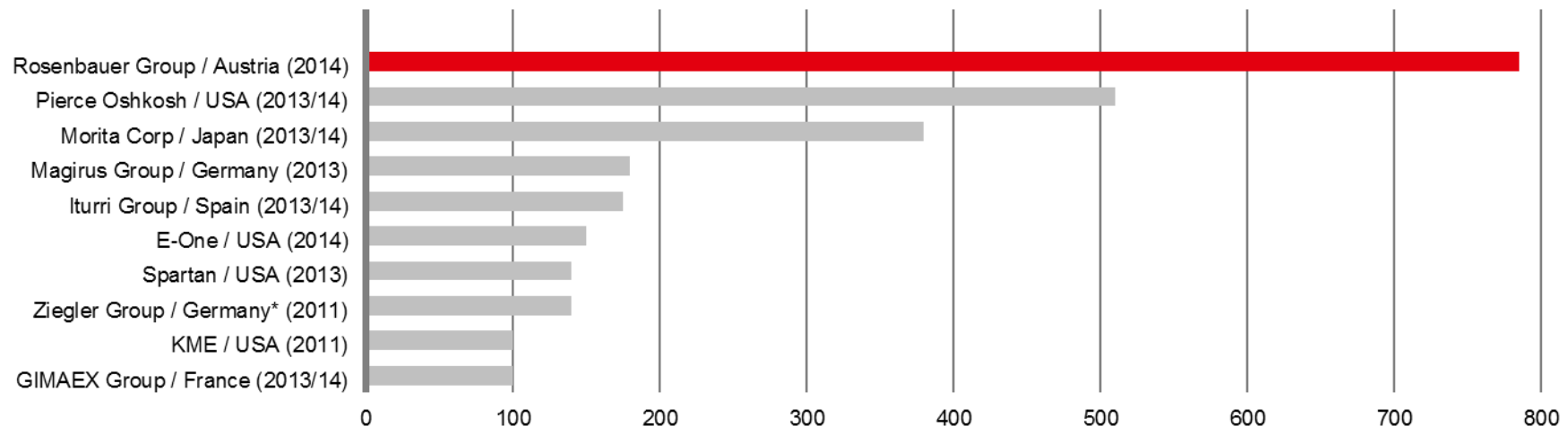


Firefighting vehicle market



- **Worldwide volume € 3,440 million (2012: € 3.061 million) p.a.**
 - **17.000 vehicles (2012: 16,000) p. a.**
- **Most purchasers are public sector clients**
- **Rosenbauer worldwide No. 1**
 - Worldwide market share 19.2% (2012: 19.2%)
- **World sales share of Top 10 companies appr. 77%**

Ranking of firefighting vehicle manufactures (Revenues in € million)



Source: Latest annual financial statements / Rosenbauer estimates / UNO statistics 2013 (as of July 2015)

Full-liner



Vehicles

70% revenues



Aerials

9% revenues



Components

3% revenues



Equipment

10% revenues



Customer Service/Others

7% revenues



Stationary fire protection

1% revenues



Industrial Firefighting Vehicles



The New AT
latest Aluminum Technology



CBS Type Vehicles
up to 18000 Liters



CBS Type Vehicles
with HRET



Dry Powder Vehicles
up to 6000 kg



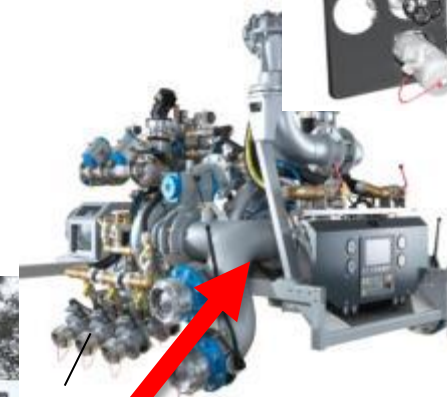
Rescue & Hazmat
Special Solutions



Aerials
up to 56 m



Rosenbauer – All out of one hand



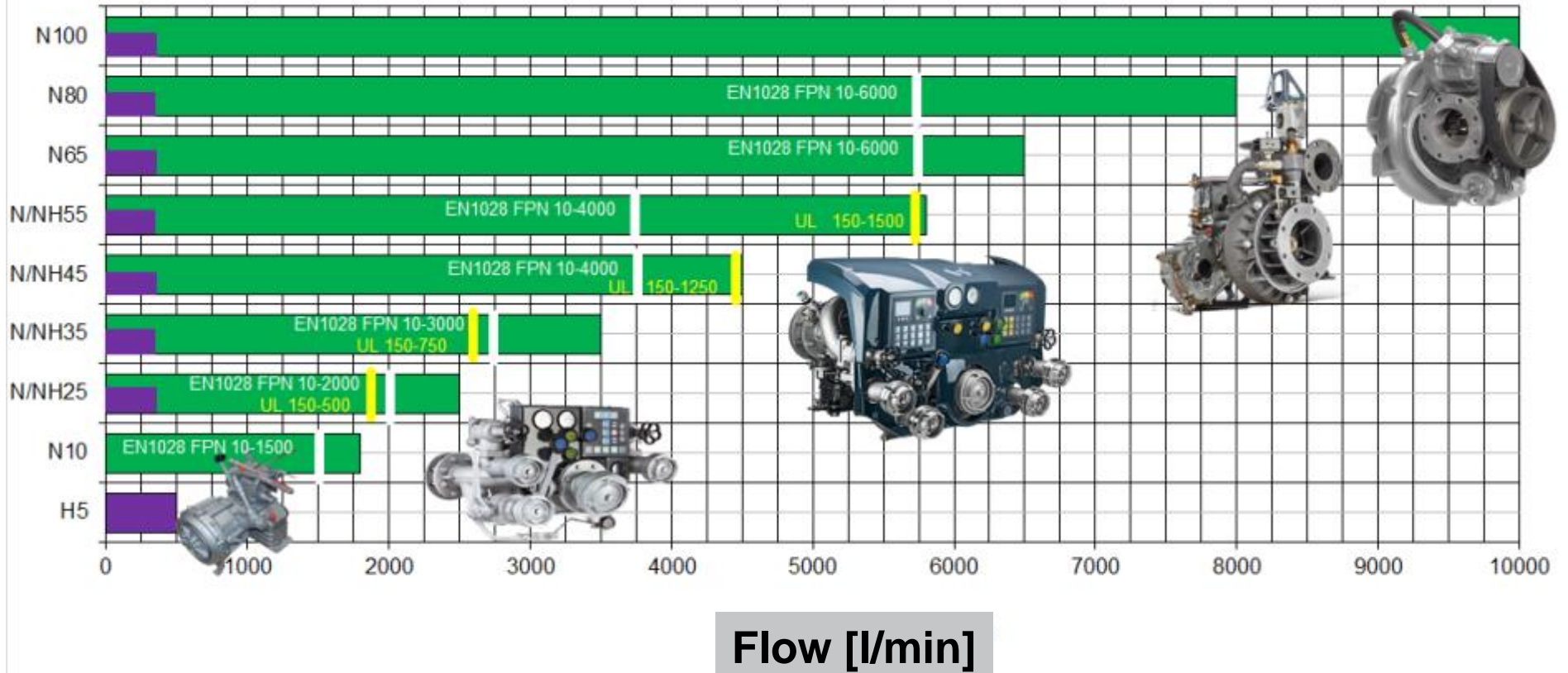
The pump for your demands



- Pumps available: normal pressure, combined normal and high pressure
- Maximum pump outputs from 1,000 lpm to 10,000 lpm at 10 bar (tank suction mode)
- Operation the same at all pumps – similar to foam systems



Pumps



N65 / N80 - Performance



■ Normal Pressure

1-stage pump

N65: 6,500 lpm at 10 bar
(1,720 gpm at 150 psi)

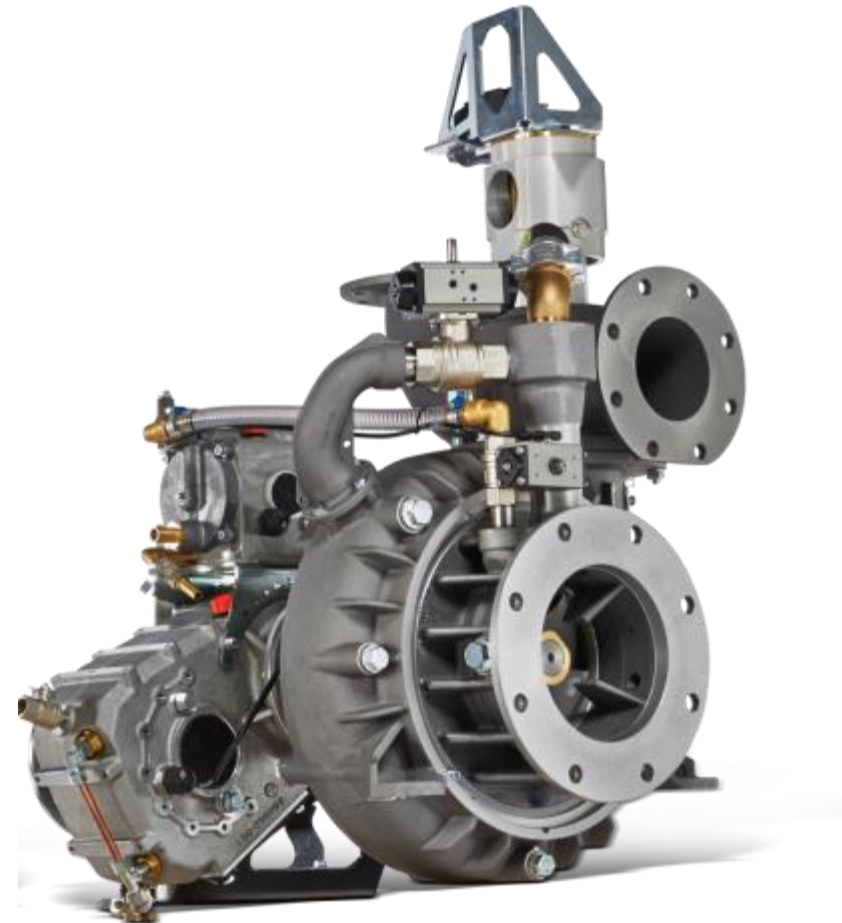
N80: 8,000 lpm at 10 bar
(2,115 gpm at 150 psi)

all values at 3 m suction height

pumps are certified according
EN1028 FPN 10-6000

■ Option: High Pressure

up to 400 lpm at 40 bar
(105 gpm at 600 psi)



Around-the-pump foam systems

- Adds foam to the whole system
- pump is full with foam
- easy, most mechanical system
- either on all outlets foam or on all outlets water
- for big amounts of foam (turret)
- no hydrant feeding into the pump possible

Direct-injection foam systems

- Adds foam directly on the outlet(s)
- no foam in the water pump
- electrical controlled systems
- on the outlets you can chose individually, if you want water or foam
- hydrant feeding of the pump is possible

Foam Systems for each industrial application



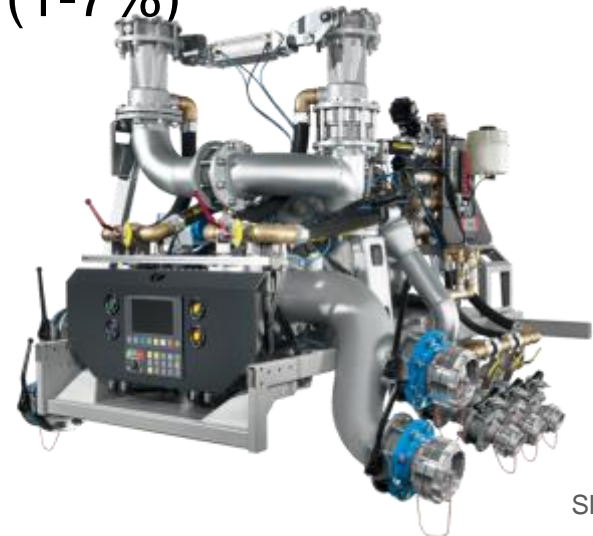
MIXMATIC

- Centrifugal pump N10 as foam pump – up to 450 lpm or 700 lpm at 16 bar
- driven by 4 cylinder Hatz diesel
- stepless adjustable %-rate per outlet (1-7%)



HYDROMATIC

- Gear pump as foam pump – 450 lpm or 700 lpm at 16 bar
- driven by hydraulic drive via 2nd PTO
- stepless adjustable %-rate per outlet (1-7%)



The turret for your demands



- Turrets available: with o-stream nozzle, foam barrel, for powder application
- Also fully CAFS ability at all turrets
- Maximum turret outputs from 1.000 l/min to 13.000 l/min at 10 bar
- Different operation handles – same for all turrets



Turrets

■ RM15



- up to 1.500 l/min at 10 bar

■ RM35



- up to 3.500 l/min at 10 bar
- Option: up to 4.750 l/min at 10 bar

■ RM80



- up to 8.000 l/min at 10 bar
- Option: up 4.000 l/min at 10 bar

■ RM130



- up 13.000 l/min at 10 bar

Rosenbauer Stinger for industrial application

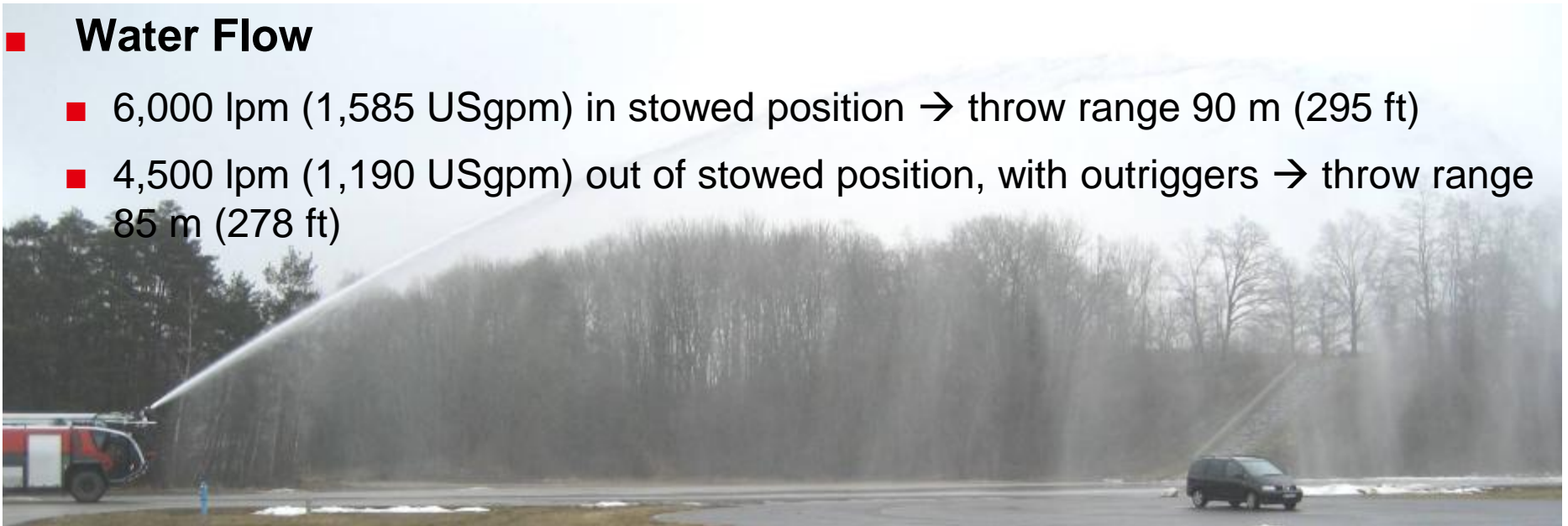


■ Technical Data

- **Max. working height Stinger54:** 16.5 m (54 ft) from middle of turret to ground
- **Max. working height Stinger66:** 20.0 m (66 ft) from middle of turret to ground
- **Rotation angle:** 360° endless, with hydraulic operated outriggers
- **Color:** anthracite

■ Water Flow

- 6,000 lpm (1,585 USgpm) in stowed position → throw range 90 m (295 ft)
- 4,500 lpm (1,190 USgpm) out of stowed position, with outriggers → throw range 85 m (278 ft)



Stinger - operation

- Via remote control
- connection cable works also as cable control
- rechargeable accumulator – chargeable via connection cable
- complete Rosenbauer electric and CAN Bus technology
- automatic and fast move to 3 pre-programmed positions by hitting a button
- „Stow“-button for automatic stow position
- clash control for cab and body



■ ROSENBAUER O-stream nozzle

■ Change of the flow:

full and half amount can be adjusted directly on the nozzle

■ spray adjustment – stepless between full- and spray stream

■ with light on the tip of the nozzle

■ ROSENBAUER Chem Core nozzle (Option)

■ O-stream nozzle with injection of dry chem in the middle of the nozzle

■ higher throw range of the dry chem – water to guide the dry chem



Rosenbauer Stinger for industrial application



Function



Stinger - piercing Tool (Option)



- Hydraulic operated
- can be turned up and down
- has its own drive and shooting mechanism
- hardened steel piercing tip
- delivers the water, where it is needed
- flow up to 1,000 lpm (264 USgpm)





High Volume Tank Fire Fighting Vehicles

 **rosenbauer**

CBS – Customized Body System Modular Construction for Best Flexibility



- Customized to your Specifications
- Superior Performance
- Lightweight Aluminum Construction
- Latest Rosenbauer Fire Fighting Technology
- Pump Capacity up to 10.000 l/min
- Water/Foam Tank Capacity up to 18.000 liters
- Turret Capacity up to 10.000 l/min
Throw Range up to 125 m
- Optional available Fully Automatic
Around the Pump Foam Systems
(e.g. Mixmatic / Hydromatic)
- Rosenbauer CAN Bus Control
System



CBS – Customized Body System Modular Construction for Best Flexibility



Fire trucks for Industrial Fire Fighting



- **Heavy Foam Trailer**
- **Oil field operations**
- **Foam tank: 30.000 l**
- **Turret: RM60M**
- **Pump: N100**
- **Proportioning System: MIXMATIC 500**

Fire trucks for Industrial Fire Fighting



- **Industrial Firefighting Vehicle 18.000**
- **Water tank: 4.000 l**
- **Foam tanks: 9000 l + 5000 l**
- **Turret: RM60E**
- **Pump: R600**
- **Proportioning System: FOAMATIC E**

Fire trucks for Industrial Fire Fighting



- **Industrial Firefighting Vehicle 17.000**
- **Water tank: 12.000 l**
- **Foam tank: 5000 l**
- **Turrets: RM130C, RM25C, RM65C**
- **Pump: N100**
- **Proportioning System: HYDROMATIC**
- **HRET Stinger + Piercing Tool**

Fire trucks for Industrial Fire Fighting



- **Industrial Firefighting Vehicle 16.000**
- **Water tank: 14.000 l; Foam tank: 2000 l**
- **Turrets: RM60C; Pump: N100**
- **Proportioning System: FOAMATIC E**

Fire trucks for Industrial Fire Fighting



- Industrial Firefighting Vehicle 14.000
- Water tank: 5.800 l
- Foam tanks: 8.200 l
- Turret: RM65C, RM15C
- Pump: N100
- Proportioning System: MIXMATIC
- HRET Stinger

Fire trucks for Industrial Fire Fighting



- **Universal Firefighting Vehicle 13.000**
- **Water tank: 4.000 l**
- **Foam tank: 8.000 l**
- **Powder tank: 1.000 kg**
- **Turrets: RM60C, RM15C, RM65C**
- **Pump: R600**
- **Proportioning System: FOAMATIC E**
- **HRET Stinger**

Fire trucks for Industrial Fire Fighting



- **Universal Firefighting Vehicle 11.000**
- **Water tank: 10.000 l; Foam tank: 1.000 l**
- **Powder tank: 500 kg**
- **Turret: RM60C; Pump: N100**
- **Proportioning Systems: HYDROMATIC/DIGIMATIC**

Fire trucks in comparison to stationary units



- Always the best position to fight the fire
- Fire can be fight from different sides with more trucks
- Standpoint can be changed if necessary (wind,.....)
- Flexible solution – different trucks for different needs
- Two turrets to fight different fires
- With hydrants no problem to supply the trucks

Fire trucks for Industrial Fire Fighting



- Heavy Duty Firefighting Vehicle 33.000
- Water tank: 33.000 l
- Turret: RM60C
- Pump: N80



Thank you!

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