



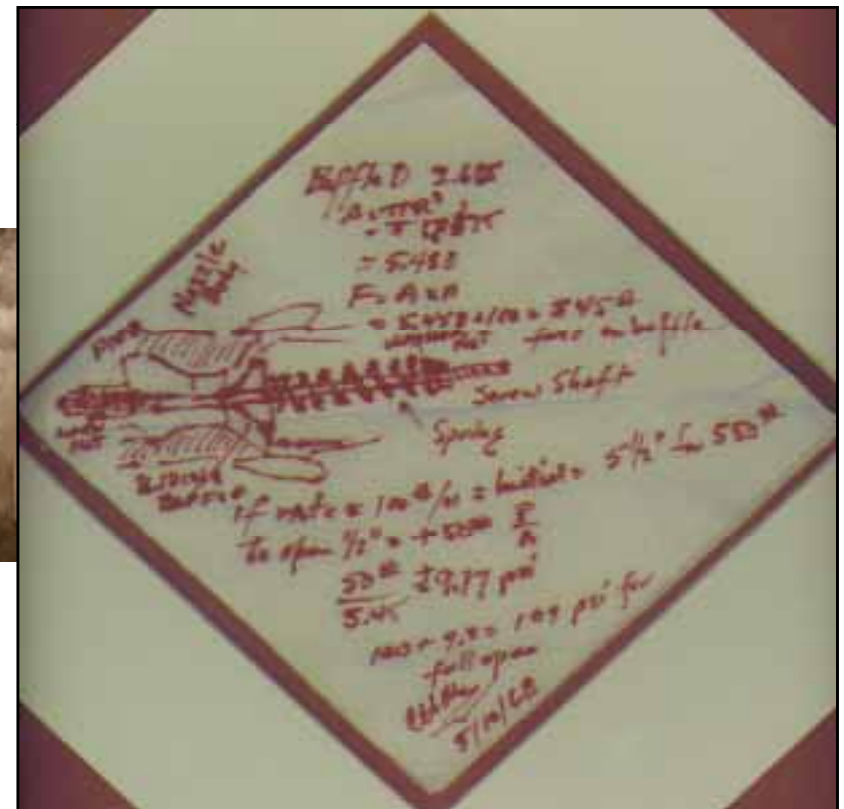
TASK FORCE TIPS

FIRE FIGHTING EQUIPMENT

TASK FORCE TIPS

*** Automatic Nozzle ***

Chief Clyde McMillan – Valparaiso, Indiana 1968





- Established in 1971 • 200 Employees • 14,000 m²

TASK FORCE TIPS



Represented in over 60 Countries

Algeria, Argentina, Australia, Austria, Bahrain, Bolivia, Brazil, Canada, Chile, China, Colombia, Costa Rica, Czech Republic, Denmark, Dominican Republic, Honduras, Ecuador, Egypt, Salvador, Estonia, Finland, France, Germany, Guatemala, Iceland, **India**, Indonesia, Ireland, Israel, Italy, Japan, Kuwait, Latvia, Lebanon, Lithuania, Luxemburg, Malaysia, Mexico, Morocco, Netherlands, New Zealand, Nicaragua, Oman, Panama, Paraguay, Peru, Philippines, Portugal, Qatar, Russia, Saudi Arabia, Singapore, South Africa, South Korea, Spain, Sweden, Taiwan, Thailand, Turkey, United Kingdom, Uruguay, Venezuela & Vietnam

TASK FORCE TIPS



Partial List of Major Global Customers

- **British Petroleum**
 - **Exxon**
 - **Sunoco**
 - **Shell**
 - **Chevron**
 - **Conoco Philips**
 - **Houston Refining**
 - **Marathon Petroleum**
 - **Total Petroleum**
 - **Tesoro**
 - **Petrobras**
 - **Pemex**
 - **Ecopetro**
 - **Petrochemical Corpn Singapore**
 - **Suncor**
 - **SK Energy**
 - **Reliance Industries Ltd**
 - **Saudi Aramco**
 - **SAMREF (Saudi Aramco Mobil)**
 - **SASMREF (Saudi Aramco Shell)**
 - **SIPCHEM**
 - **Marathon Refineries**
 - **Valero Refineries**
 - **Motiva Shell Refineries**
 - **Tesoro Refineries**
- Advanced Chemical Industries**
- Dupont Chemical
 - Dow Chemicals
 - BASF Chemicals
 - Oxy Chemicals
 - Dow Corning
 - Ineos Chemicals
 - Invista Chemicals

Combination Fire Fighter Nozzles



Straight Stream

Reach
Penetration



Fog Pattern

Protection
Heat Absorption
Foam Aspiration



Fixed & Spinning Teeth



**Filled Cone
Fog Pattern**



**Hollow Cone
Fog Pattern**

Selectable Gallonage Nozzles



QuadraFog (25 mm)

20, 40, 100, 150 LPM @ 7 BAR

QuadraFog (38 mm)

NFPA 1964
COMPLIANT

110, 230, 360, 470 LPM @ 7 BAR

110, 230, 360, 470 LPM @ 5 BAR



ThunderFog (38 mm)

NFPA 1964
COMPLIANT

110, 230, 360, 470, 570, 750 LPM @ 7 BAR

110, 230, 360, 470, 570, 750 LPM @ 5 BAR



ThunderFog (38 & 65 mm)

NFPA 1964
COMPLIANT

360, 470, 570, 750, 950 LPM @ 7 BAR



Automatic Nozzles



Ultimatic (25 & 38 mm)

40 – 500 LPM @ 7 BAR

40 – 400 LPM @ 5 BAR



Mid-Matic (38 mm) NFPA 1964 COMPLIANT

260 – 760 LPM @ 7 BAR

260 – 760 LPM @ 5 BAR

260 – 680 LPM @ 4 BAR



Handline (38 mm)

360 – 1150 LPM @ 7 BAR

360 – 950 LPM @ 5 BAR

360 – 850 LPM @ 4 BAR



Handline (65 mm)

360 – 1150 LPM @ 7 BAR

360 – 950 LPM @ 5 BAR

Max-Matic (38 & 65 mm)

400 – 2000 LPM @ 5.5 or 7 BAR

Selectable Pressure Automatic Nozzles



Mid-Force (38 mm) NFPA 1964 COMPLIANT

260 – 760 LPM @ 7 & 4 BAR

260 – 760 LPM @ 5 & 3 BAR

Dual-Force (38 & 65 mm)

360 – 1150 LPM @ 7 & 4 BAR

360 – 950 LPM @ 5 & 3 BAR

Max-Force (38 & 65 mm)

400 – 2000 LPM @ 7 & 3.5 BAR



**Low Expansion
Attachments**

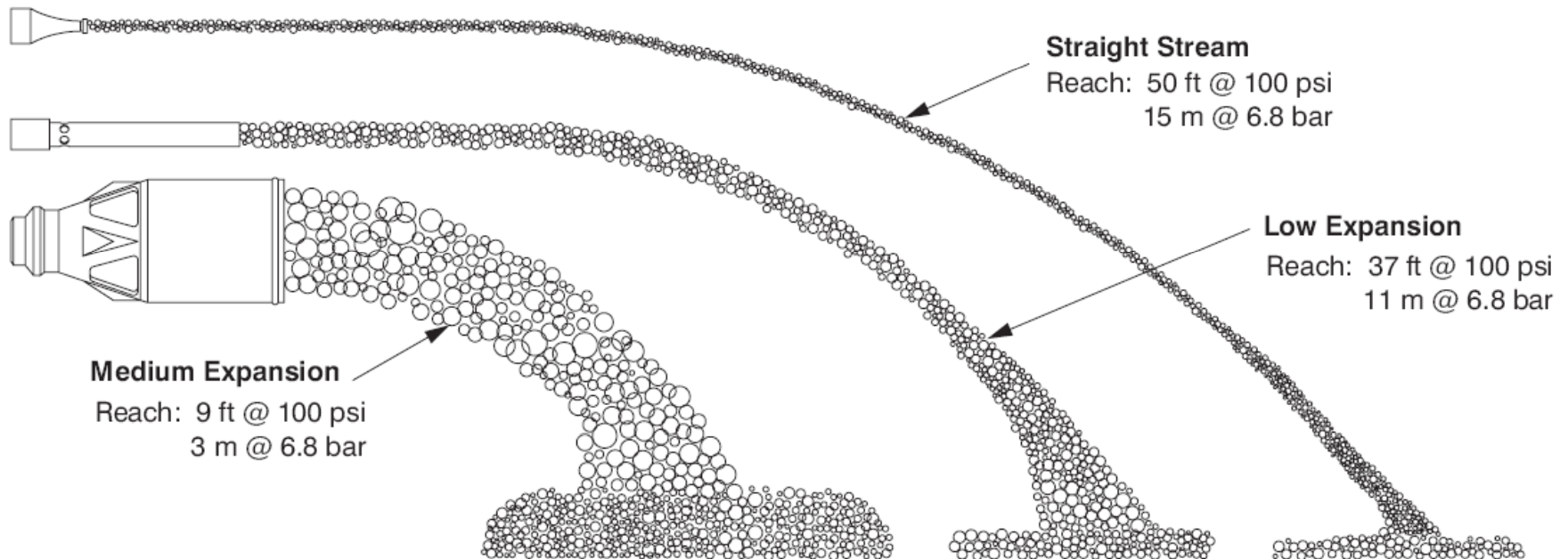
**Multi-Expansion
Attachments**



PRO/pak



- Rated Flow – 45 LPM @ 6.8 BAR
- Maximum Operating – 100 LPM @ 40 BAR
- Minimum Operating – 30 LPM @ 3 BAR
- Tank Capacity – 9.5 Liters
- Class A Foam – OFF, 0.1%, 0.2%, 0.3%, 0.4% & 1%
- Class B Foam – OFF, 1%, 3% & 6%
- Twist Grip Flow Control Valve
- Weight – Full: 13.6 Kgs; Empty: 5.3 Kgs
- Size (Storage) – 345 x 275 x 430 mm



PORTABLE MONITORS



Portable/Deck Monitor



Crossfire with Safe-Tak 1250



- Maximum Inlet Pressure – 12 BAR
- Maximum Rated Flow – 4500 LPM
- Pressure Loss @ Maximum Rated Flow – Deck Mount: 1.9 BAR; Portable: 3.7 BAR
- Elevation – Deck Mount: to 90° above Horizontal; Portable: 35° to 90° above Horizontal
- Deck Mount Horizontal Rotation – 360°, **Positive, Non-Friction Rotation Lock**
- **Safe-Tak Flow Safety Valve – 90% Reduction in Flow**
- Weight – Monitor Top 7.5 Kgs; Safe-Tak 1250 Base 13.7 Kgs (max.)
- Base Folded Size (Storage) – 510 x 230 x 230 mm (approx.)

BlitzFire Portable Attack Monitor



The safest, lightest, most versatile initial attack monitor ever!



Blitzfire & Blitzfire OSC



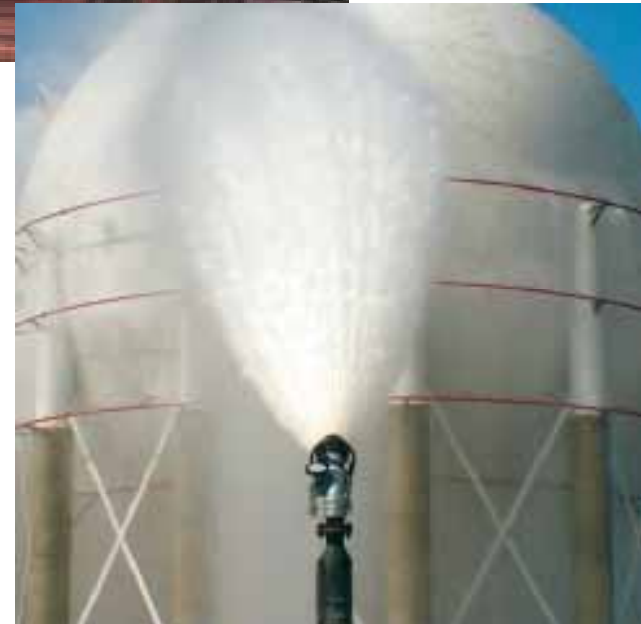
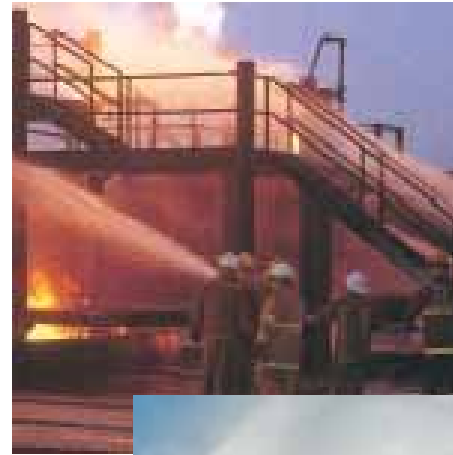
- Maximum Inlet Pressure – 12 BAR
- Maximum Rated Flow – 2000 LPM @ 7 BAR
- Pressure Loss @ Maximum Rated Flow – 1.5 BAR (Oscillating – 2.4 BAR)
- Optional Hydraulic Oscillator – Adjustable $\pm 10^\circ$, $\pm 15^\circ$, $\pm 20^\circ$ or Disengaged
- **Elevation – 10° to 50° above Horizontal**
- Horizontal – 20° Side-to-Side
- Pivoting Inlet
- **Safe-Tak II Safety Shut Off Valve**
- **Flow Control – Slide Valve with 6 Flow Position Detents**
- Weight – 10.7 Kgs (Oscillating – 14.1 Kgs)
- Folded Size (Storage) – 650 x 210 x 260 mm (Oscillating – 730 x 280 x 210 mm)

Fixed Station Monitors

Apparatus



Industrial Installations



Manual & RC Monitors



Remote
Control

Tornado

- Q_{Max} 1900 LPM
- ΔP_{Max} 1.3 BAR



Manual



Remote
Control

Hurricane

- Q_{Max} 4700 LPM
- ΔP_{Max} 1.9 BAR



Remote
Control

Typhoon

- Q_{Max} 5700 LPM
- ΔP_{Max} 1.3 BAR



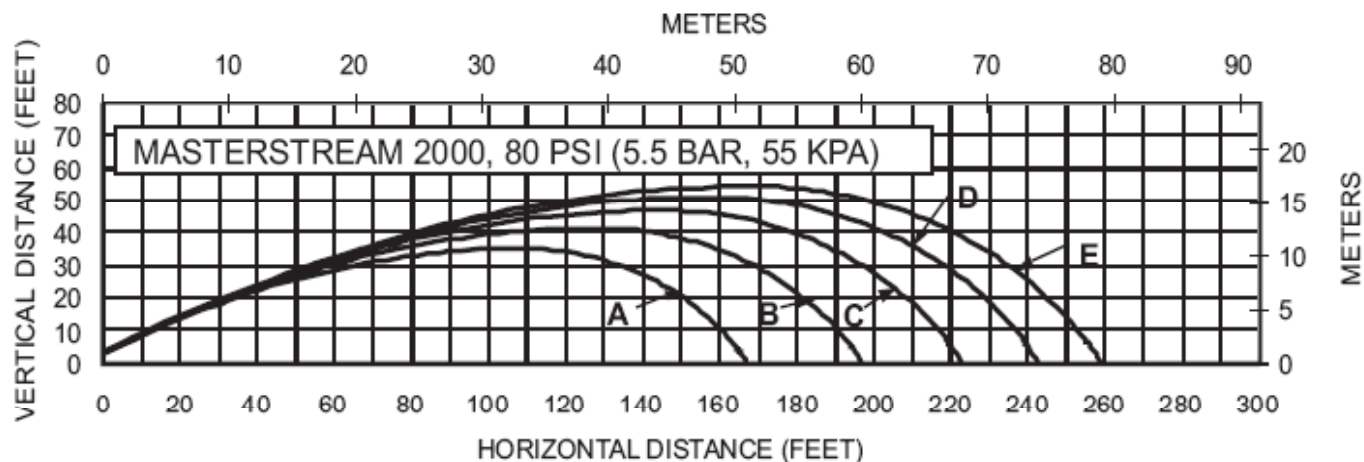
Manual



Remote
Control

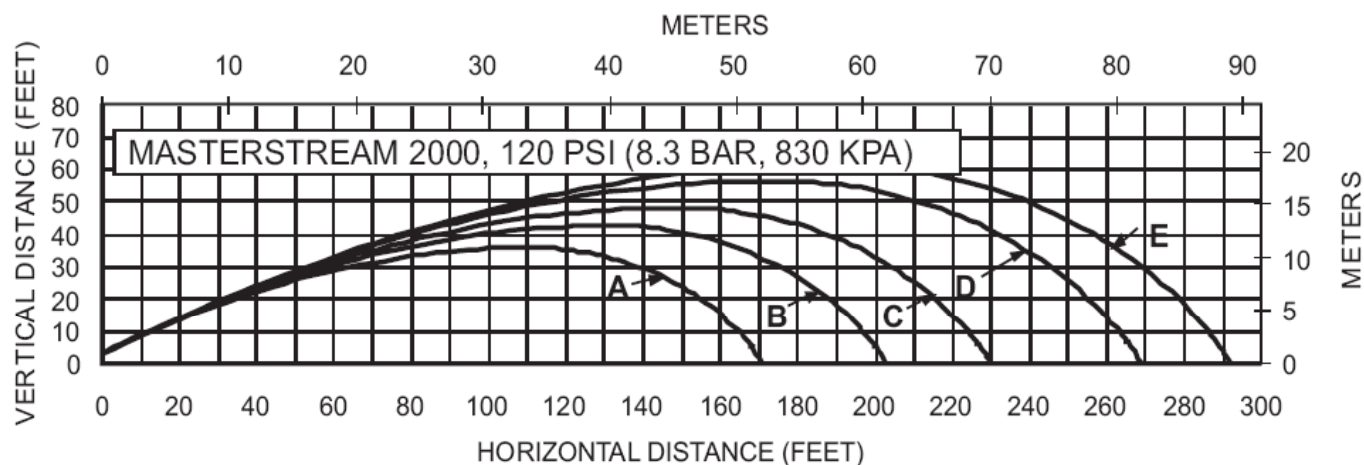
Monsoon

- Q_{Max} 7600 LPM
- ΔP_{Max} 1.0 BAR



CURVE	GPM FLOW	LBS REACTION
A	300	140
B	600	270
C	1000	450
D	1500	680
E	2000	900

CURVE	LPM FLOW	KGF REACTION
A	1100	60
B	2300	120
C	3800	200
D	5700	300
E	7500	400



CURVE	GPM FLOW	LBS REACTION
A	300	170
B	600	330
C	1000	550
D	1500	830
E	2000	1100

CURVE	LPM FLOW	KGF REACTION
A	1100	70
B	2300	150
C	3800	250
D	5700	370
E	7500	490

Monitor Nozzle	Flow @ Pressure	Distance	Height
Max Series	1,900 LPM @ 4 BAR	62 m	13 m
Max Series	1,900 LPM @ 5.5 BAR	62 m	13 m
Max Series	1,900 LPM @ 7 BAR	62 m	13 m
ZN Industrial	2500 LPM @ 5 BAR	56 m	11 m
ZN Industrial	2800 LPM @ 7 BAR	67 m	14 m
ZMF Master Foam	3000 LPM @ 7 BAR	58 m	12 m
Master Stream 1000	3,800 LPM @ 7 BAR	72 m	15 m
ZM Industrial	4,750 LPM @ 7 BAR	76 m	17 m
Master Stream 1250S	4,500 LPM @ 10 BAR	73 m	17 m
Master Stream 1250	4,700 LPM @ 4.8 BAR	67 m	14 m
Master Stream 1250	4,700 LPM @ 7 BAR	79 m	16 m
Master Stream 1250	4,700 LPM @ 8.3 BAR	82 m	17 m
Master Stream 1500	5,700 LPM @ 4.8 BAR	70 m	15 m
Master Stream 1500	5,700 LPM @ 7 BAR	82 m	17 m
Master Stream 1500	5,700 LPM @ 8.3 BAR	85 m	18 m
Master Stream 2000	7,500 LPM @ 5.5 BAR	81 m	17 m
Master Stream 2000	7,500 LPM @ 7 BAR	88 m	19 m
Master Stream 2000	7,500 LPM @ 8.3 BAR	91 m	20 m
Master Stream 4000	15,000 LPM @ 5.5 BAR	83 m	18 m
Master Stream 4000	15,000 LPM @ 7 BAR	99 m	21 m
Master Stream 4000	15,000 LPM @ 8.3 BAR	107 m	23 m

Thank You



TASK FORCE TIPS

FIRE FIGHTING EQUIPMENT