



Watermist in fire fighting of small & medium fires

Ania Lada, TELESTO

17th IWMC, Rome, Italy, 25 Oct 2017

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TELESTO MIST SYSTEMS



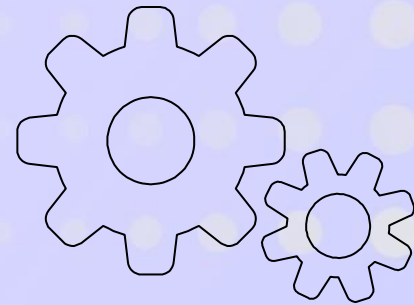
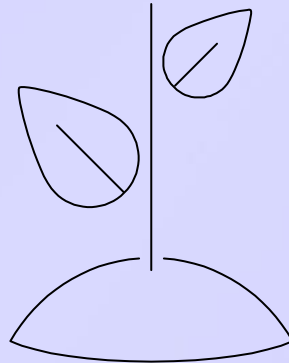
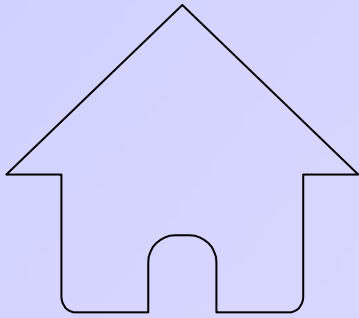
Warm up game

„TV”

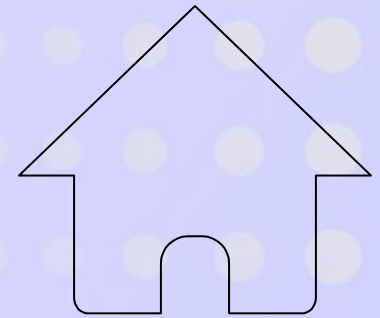


About 90% are small and 5% medium fires (Poland)

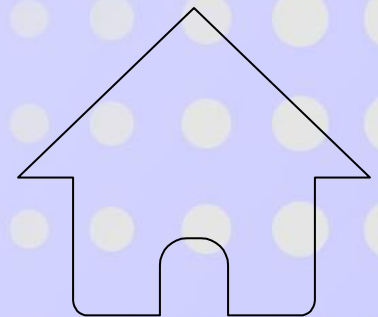
Fires



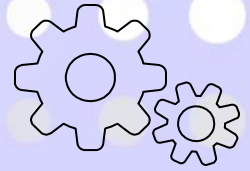
Water mist extinguishers



Extinguishing edible oil - water mist

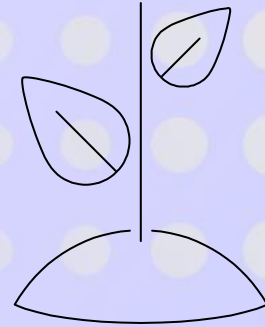


Extinguishing rubber/tyres



Fire fighting of bushes and grass

- 41% are non-residential outdoor fires
- 915 brush, grass & forest fires a day
 - 41% brush
 - 37% grass
 - only 4% more than 1 acre



NFPA's "[Brush, Grass and Forest Fires](#)"

Grass fire



Water pressure: 6 bar
Water consumption: 28 l/min
Droplet size: 70-120 microns



State Fire Brigade
test report



Low pressure water mist for fire fighting of small & medium fires
Ania Lada
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Grass fire „turned off”



State Fire Brigade
test report

Water pressure: 6 bar
Water consumption: 28 l/min
Droplet size: 70-120 microns

Low pressure water mist for fire fighting of small & medium fires
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Small solutions

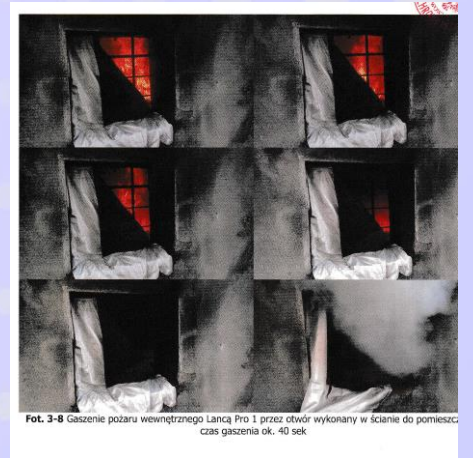


- Comparison test (Poland) - tyres and wood
- Stored pressure EcoPack uses 10 times less water than the traditional service

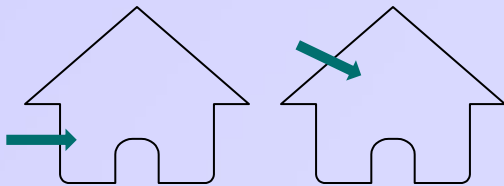
Building fires without entering



Fot. 16 Wykonywanie otworu młotowiertaką akumulatorową HILTI, dołączoną do Lanc Pro

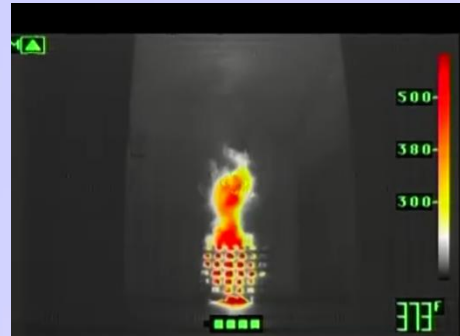
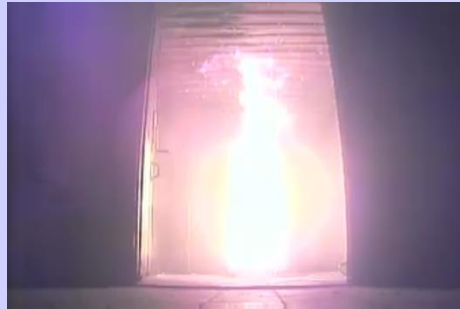


Fot. 3-8 Gaszenie pożaru wewnętrznego Lancą Pro 1 przez otwór wykonany w ścianie do pomieszczenia czas gaszenia ok. 40 sek



State Fire Brigade
test report

Tests of cooling capabilities of water mist lances



- 1MW fires in enclosed spaces
- Testing of various nozzles to establish effectiveness

<u>PSI</u>	<u>Nozzle</u>	<u>GPM</u>	<u>PSI Nozzle</u>	<u>Start Temp</u>	<u>End Temp</u>	<u>Discharge Duration</u>
150	LancePro 1	16,00	150,00	700+ -	<100'	:30
250	European manufacturer	26,00	220,00	444,00	254,00	02:00
1400	US manufacturer	17,00	1200,00	459	< 200	01:10

Laramie Fire Brigade test results

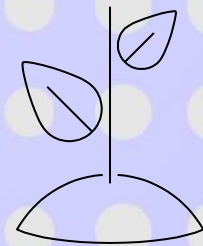
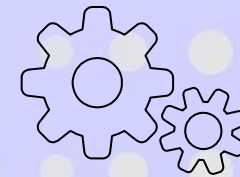
- Start temperature 700C+
- Down to below 100C in 30 sec

- Power of cooling!

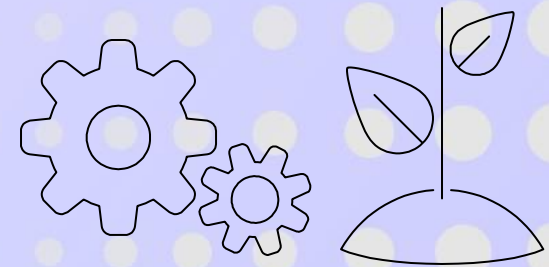
Lances in firefighting other applications



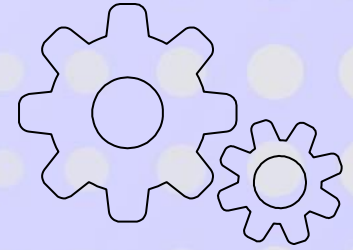
Antiterrorist training by Polish State Fire Brigade



Water mist curtain



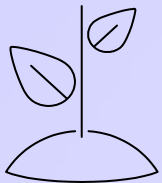
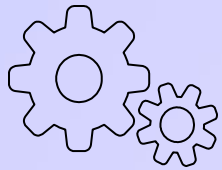
Protection of machinery



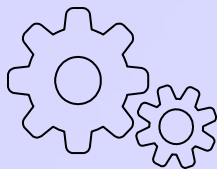
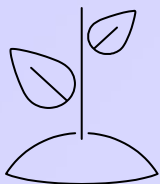
- Budget limitation
- Solution:
 - Semi-fixed firefighting systems

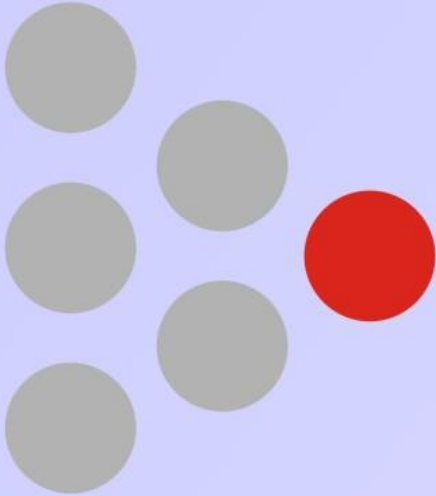


Portable solutions for emergency cases, fire truck substitutes



Portable solutions for emergency cases, fire truck substitutes





**Many thanks
for your attention**

Enjoy your evening!



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