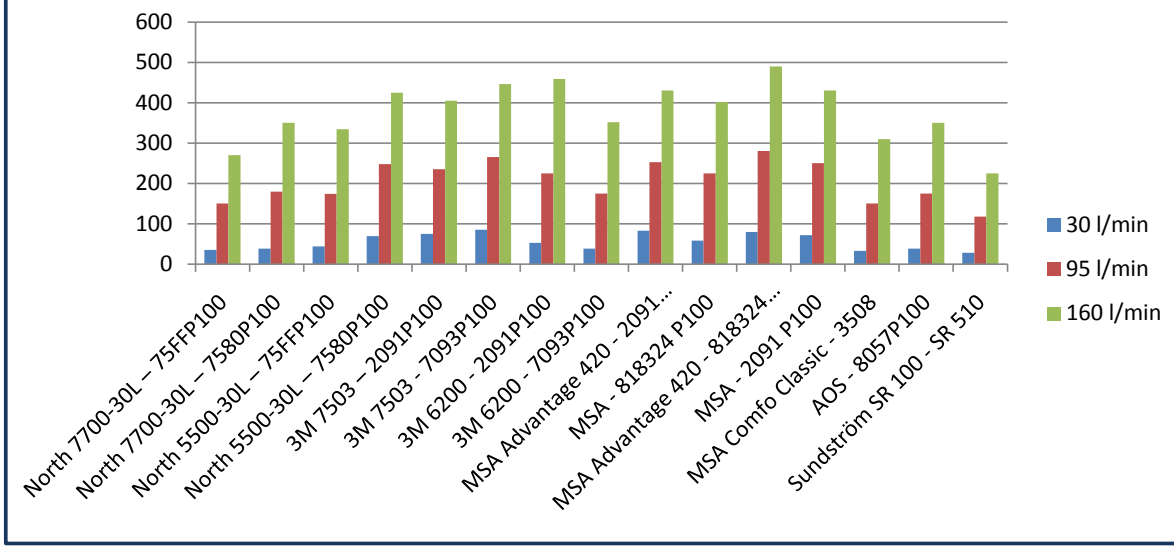
APR Respiratory Comparison Study

with focus on Inhalation/Exhalation breathing resistance and Filter Area

North 7700-30L – 75FFP100		3M 6200 - 2091P100	
North 7700-30L – 7580P100		3M 6200 - 7093P100	
North 5500-30L – 75FFP100		MSA - 818324 P100	
North 5500-30L – 7580P100		MSA - 2091 P100	
MSA Comfo Classic - 3508		3M 7503 – 2091P100	
Sundström SR 100+SR 510		3M 7503 - 7093P100	
MSA Advantage 420 - 2091 P100		AOS - 8057P100	
MSA Advantage 420 - 818324 P100			

Sundström

INHALATION RESISTANCE (Pa)



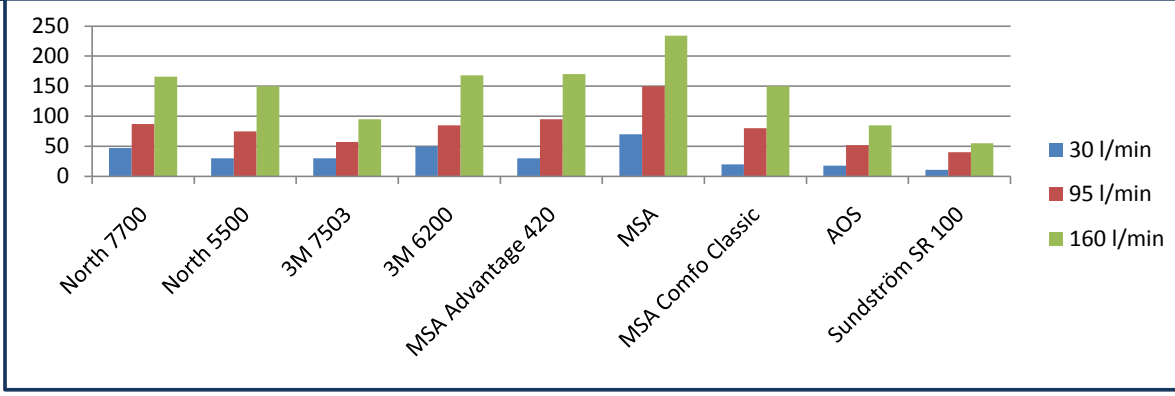
INHALATION RESISTANCE

Type of Mask & Filter	30 l/min	95 l/min	160 l/min
North 7700-30L – 75FFP100	35	150	270
North 7700-30L – 7580P100	38	180	350
North 5500-30L – 75FFP100	44	174	334
North 5500-30L – 7580P100	69	248	425
3M 7503 – 2091P100	75	235	405
3M 7503 - 7093P100	85	265	446
3M 6200 - 2091P100	53	225	459
3M 6200 - 7093P100	38	175	352
P100	83	253	430
MSA - 818324 P100	58	225	402
P100	80	280	490
MSA - 2091 P100	72	250	430
MSA Comfo Classic - 3508	33	150	310
AOS - 8057P100	38	175	350
Sundström SR 100 - SR 510	28	118	225

EXHALATION RESISTANCE

Type of Mask & Filter	30 l/min	95 l/min	160 l/min
North 7700	47	87	166
North 5500	30	75	150
3M 7503	30	57	95
3M 6200	50	85	168
MSA Advantage 420	30	95	170
MSA	70	150	234
MSA Comfo Classic	20	80	150
AOS	18	52	85
Sundström SR 100	11	40	55

EXHALATION RESISTANCE (Pa)



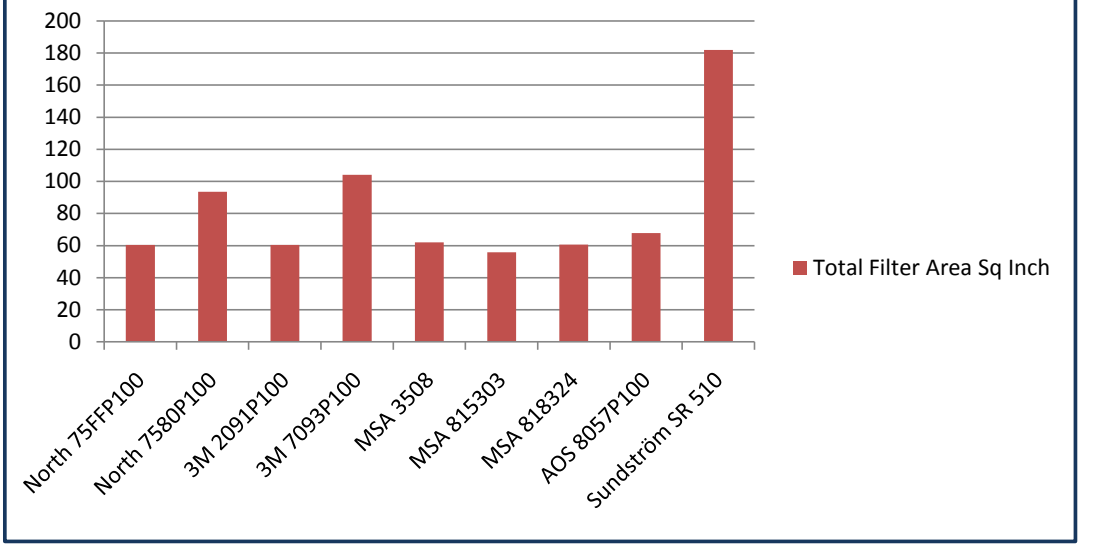
Sundström

TYPES OF FILTERS COMPARED

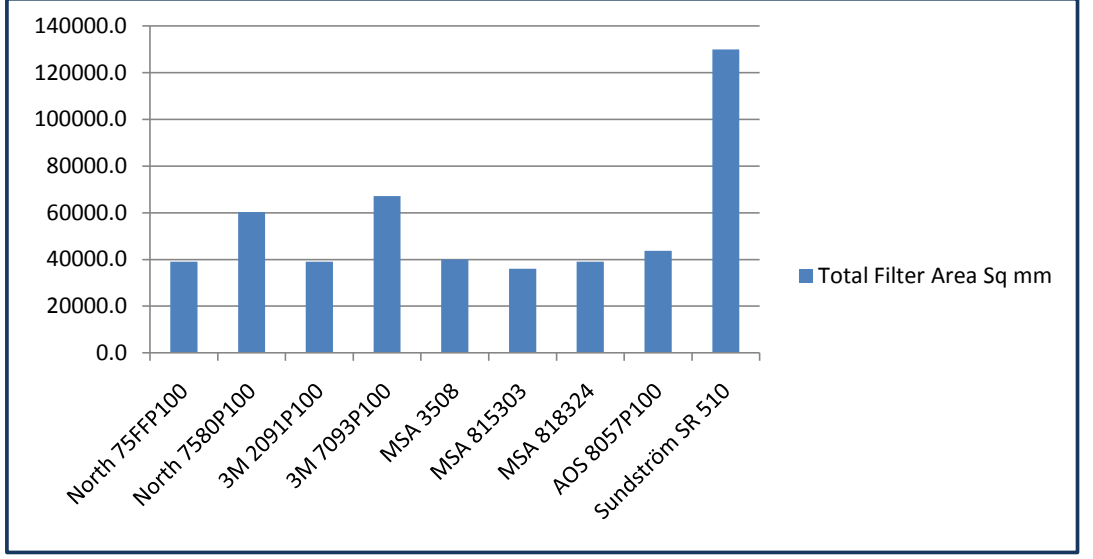
Picture Illustrated

Sundström - SR 510		
3M - 7093P100		
AOS - 8057P100		
MSA - 2091P100		
3M - 2091P100		
North - 75FFP100		
North - 7580P100		
MSA - 818324P100		
MSA - 3508		

TOTAL FILTER AREA SQ INCH



TOTAL FILTER AREA SQ MM



Particle filter	Total Filter Area		No of filter
	Sq mm	Sq Inch	in mask
North 75FFP100	39034.2	60.5	2
North 7580P100	60336.2	93.5	2
3M 2091P100	39034.3	60.5	2
3M 7093P100	67200.0	104.2	2
MSA 3508	40000.0	62.0	2
MSA 815303	36000.0	55.8	2
MSA 818324	39100.0	60.6	2
AOS 8057P100	43750.0	67.8	1
Sundström SR 510	130000.0	201.5	1