

# Energy Saving

# High Thrust Jet



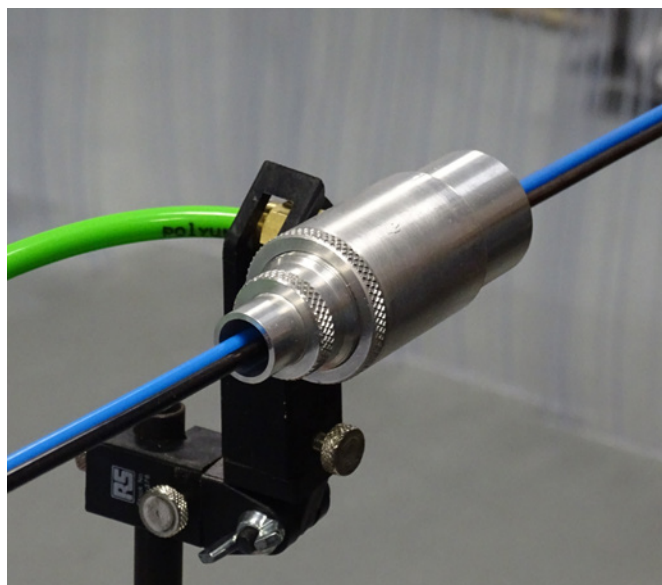
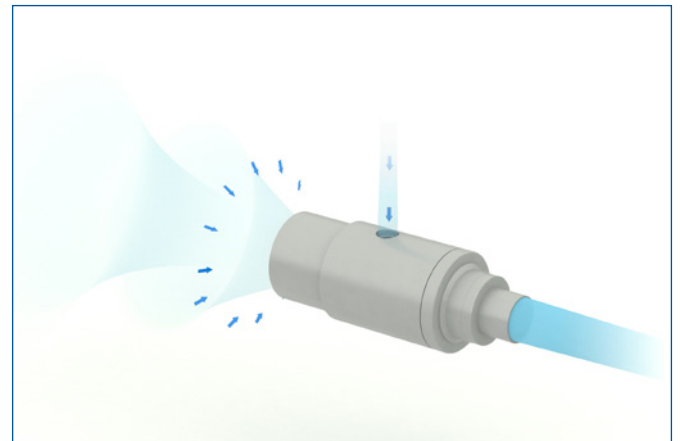
Meech Energy Saving High Thrust Jets provide large airflows whilst consuming a minimal volume of compressed air. High Thrust Jets are perfect for providing short powerful bursts of air.

## How they work

High Thrust Jets use a small amount of compressed air to generate a high powered, blast of air. Compressed air is released through an adjustable circular slot inside the High Thrust Jet. This creates a 'tube of air' that travels on the inside of the Jet towards the front. The air movement creates areas of low pressure which entrains ambient air at ratios of between 4 and 6:1.

## Features and Benefits

- Energy Saving – High Thrust Jets can cut compressed air demand by up to 70% and reduce running costs.
- Noise Reduction – Up to 30 dBA noise reduction compared to an open pipe.
- Innovative design – offers Air Amplification at a ratio of between 4 and 6:1.
- No moving parts – No maintenance.
- Easy to install – The standard BSP thread will connect to most existing air supplies.
- Adjustable – Allows for application specific set up.
- Versatile – 4 different sizes makes them suitable for a wide variety of applications.
- Excellent performance - Thrust levels in excess of 450 grams, whilst air consumption is only 26cfm (736l/min)

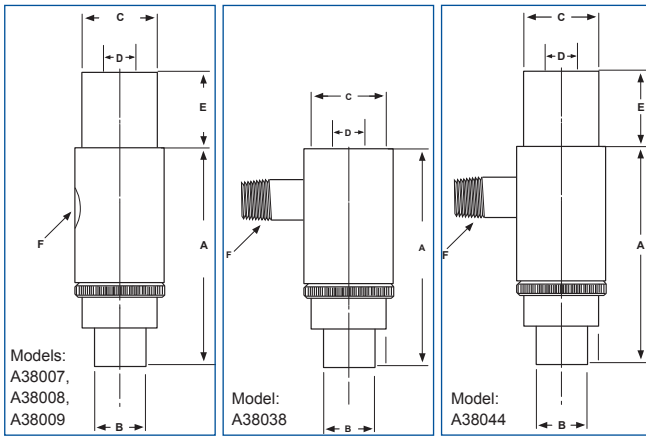


High Thrust Jet used to cool plastic tube

## Applications

- **Product redirection**  
The high powered blast of air makes the High Thrust Jet perfect for ejecting product from a production line. Typically used in the Food and Drink industry to remove substandard items.
- **Product Drying**  
The High Thrust Jets produced a high velocity concentrated tube of air. Effective drying can be achieved by passing material through the middle of the High Thrust Jet.
- **Product Cooling**  
The high velocity air flow means High Thrust Jets can be used to cool products or components. The small size allows them to be used in confined spaces.
- **Product redirection**  
High Thrust Jets can be used to move products along a production line.

## Dimensions



	A38007	A38038	A38044	A38008	A38009
A	39	55	74	71	147
B	9	13	13	17	34
C	16	25	22	32	66
D	6	9.5	9.5	12	25
E	12	N/A	19	24	50
F	M5x 6mm	1/8" BSP	1/8" BSP	1/8" BSP	1/8" BSP

## Energy Saving Example - High Thrust Jet

Company D uses 8 x 8mm ID open air pipes, running at 80psi (5.4 Bar), on 4 production lines. They are used to blow underweight packages of baked confectionary from the production line into a reject bin. On average the open pipes run for 15 minutes every hour and are running for 8 hours a day, 6 days a week and 48 weeks a year. Company C has electricity costs of 8p per kW/hr.

The air consumption of each 8mm open pipe is 75cfm (2,124 l/min) making a total air consumption of 600cfm (16,990 l/min) at 80psi (5.4 Bar). In financial terms these 8 pipes will cost over £5,000 per year to run.

By replacing the open pipes with 8 x Meech High Thrust Jets (A38038) the company can significantly reduce the air consumption and save money.

8 x Meech Energy Saving High Thrust Jets use 26 cfm each at 80 psi (5.4 Bar), making a total air consumption of 208cfm (5,890 l/min). In total the cost of running the 8 x High Thrust Jets is £1,797 per year.

Comparing the two methods the High Thrust Jets will save approximately £3,387 per year. The High Thrust Jets will also be quieter to run than the 8mm open pipe.

## Running Cost Comparison

Duration	1 x High Thrust Jet (£)	1 x 8mm Open Pipe (£)	8 x High Thrust Jet (£)	8 x 8mm Open Pipe (£)
Per Day	0.78	2.25	6.24	18.00
Per Week	4.68	13.50	37.44	108
Per Year	224	648	1,797	5,184

## Technical Information

Product Code	Product	Air Amplification	Thread Type	Total Weight (grams)	Factory setting @ 80psi (5.4 bar)
A38007	9mm Aluminium	4:1	m5 x 6mm	19	10 cfm (283 l/min)
A38038	13mm Stainless Steel	4:1	1/8" bsp (male)	128	26 cfm (736 l/min)
A38044	13mm Stainless Steel Inline	4:1	1/8" bsp (male)	140	26 cfm (736 l/min)
A38008	17mm Aluminium	6:1	1/8" bsp	123	13 cfm (368 l/min)
A38009	34mm Aluminium	12:1	1/8" bsp	980	23 cfm (651 l/min)

## Air Consumption and Noise Comparison

Inlet Air Pressure	Air Consumption										Sound Level*				
	cfm					l/min					dBA				
psi	20	40	60	80	100	20	40	60	80	100	20	40	60	80	100
Bar	1.4	2.7	4.1	5.4	6.8	1.4	2.7	4.1	5.4	6.8	1.4	2.7	4.1	5.4	6.8
A38007	3	5	8	10	11	85	142	227	283	311	72	79	82	87	90
A38038	13	18	22	26	29	368	510	623	736	821	75	80	83	85	89
A38044	13	18	22	26	29	368	510	623	736	821	75	80	83	85	89
A38008	4	8	10	13	15	113	227	283	368	425	65	73	77	80	82
A38009	14	24	34	43	50	396	680	963	1218	1416	76	81	84	86	90
6mm Pipe	11	17	27	34	40	311	481	765	963	1133	70	80	87	90	95
8mm Pipe	26	40	60	75	82	736	1133	1699	2124	2322	77	88	95	97	98

\* Sound level taken 1 meter from source  
Measured at factory setting