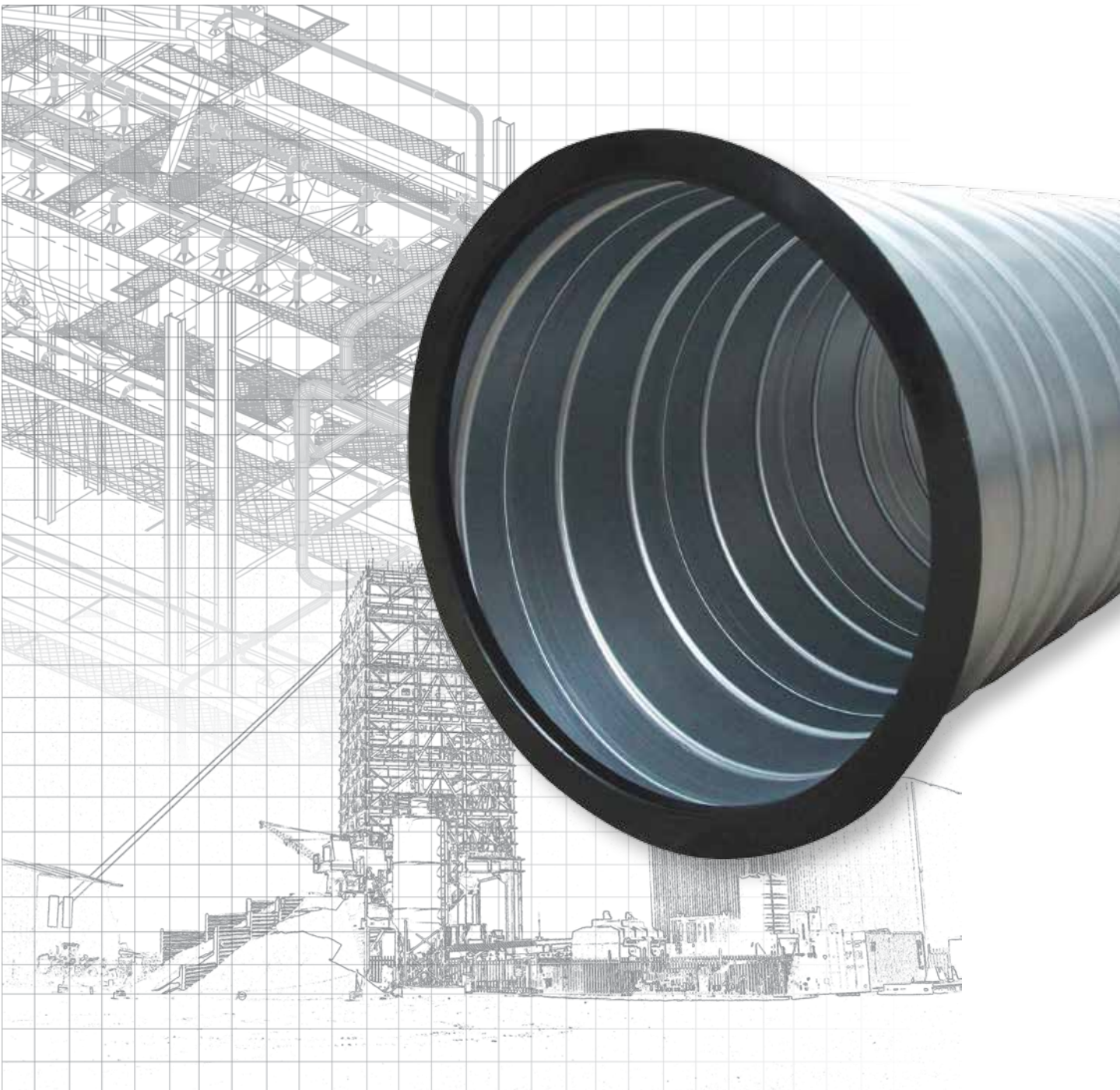




ENERDUCT™

A NEW CONCEPT IN DUCT DESIGN AND MANUFACTURING





Innovative

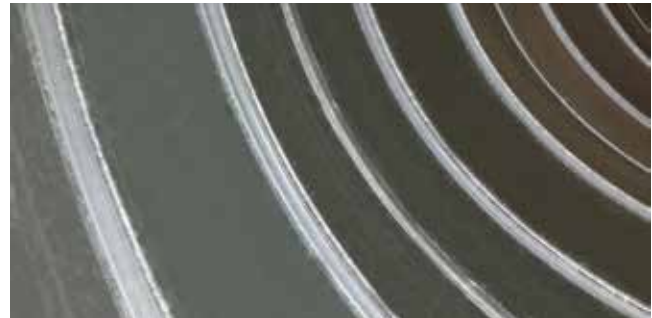
Enerduct is a new concept in duct design and manufacturing. CFD Simulation and Analysis of Air Flow on the newly spiral-swage formed ventilation duct were conducted by the CSIR to determine the flow characteristics in the Enerduct pipe.

Energy & Cost Savings

Results from the Simulation and Analysis research proved that the design of the spiral swage reduces the frictional pressure drop by between 8.80% and 13.04% at different volumetric flow rates. This translates into less fans being required per ventilation column due to the lower friction factor of this system which will result in a cost saving to the mine.

Weight & Handling

Thinner material with a higher yield strength can be utilised to manufacture ventilation pipes which will be as strong, if not stronger than conventional pipes with the same performance as the thicker material which has a lower yield strength.



Cost Savings – Manufacturing & Supply Lead Times

The manufacturing of the Enerduct pipe through its high-tech advanced processes produces pipes much faster than the conventional method, assisting us in reducing lead times which in turn reduces costs as it allows for smaller on-site stock levels to be held, freeing up cash flow for the customer.

Rigidity & Strength

The spiral swage formed into the duct during the forming process will prevent the material from de-coiling. The duct will maintain its form and is a much stronger construction than conventional ventilation pipes.

Material on every lock-formed spiral joint is punched at regular intervals as an additional strengthening mechanism, securing the robust construction of the ventilation duct for underground mining conditions.

