



Engineering a 28% void queen-size brick strong enough for setting equipment

Steele engineers are always ready to help brick plants solve production problems. We can optimize our stiff extrusion machinery for your customized combinations of raw materials, brick size and production requirements.

Our stiff extruders process materials with 10-20% moisture and varying plasticity, to produce brick, block and tile with void areas up to 65%.

THE PROBLEM — Maintain structural integrity while increasing void

Our customer wanted to **produce a queen-size brick with 28% void**, strong enough for handling with setting equipment, but the die produced 24%. Welcoming a challenge, we thought Steele could meet the target void percentage and green strength requirements.



**THE SOLUTION –
A Steele L Die and V-2 Oil Pump**

A Steele team visited the customer plant and recommended installation and trial of a complete die solution with our L Die and V-2 Oil Pump. The solution combined the right coring pattern with lubrication at both the rear of the die base and shaper cap.

The die worked from the start, producing queen-size product with 28.1% void and penetrometer reading of 4.5

Our engineers also provided a remote die oil manifold articulating arm, to maintain a safe distance between the operator and the extrusion area.



A remote die oil manifold articulating arm improved die lubrication and operator safety

**THE RESULTS –
Trouble-free production**

Six months after installation and trial, the Steele die solution continues to deliver for our customer. We've also worked with plant personnel on adding high-wear coatings for improved wear life (learn more about Steele high-wear coatings at www.jcsteele.com/high-wear-coatings/).

As our customer noted, "The coating increased service life without compromising the shape or integrity of the individual cores or the brick as a whole. And we can maintain proper webbing, shell thickness and green strength."

Want engineering and service with your machinery? Talk to your regional Steele sales representative or contact us at 1.704.872.3681.



“After installation, we’ve had no problems maintaining and occasionally exceeding a 28% void area. Regular preventive maintenance, such as replacing the shaper cap and core tips, makes it easy for the new L Die to hold our production specs.”



Learn more about the solutions we offer at www.jcsteele.com.
For more information, contact J.C. Steele & Sons at info@jcsteele.com.