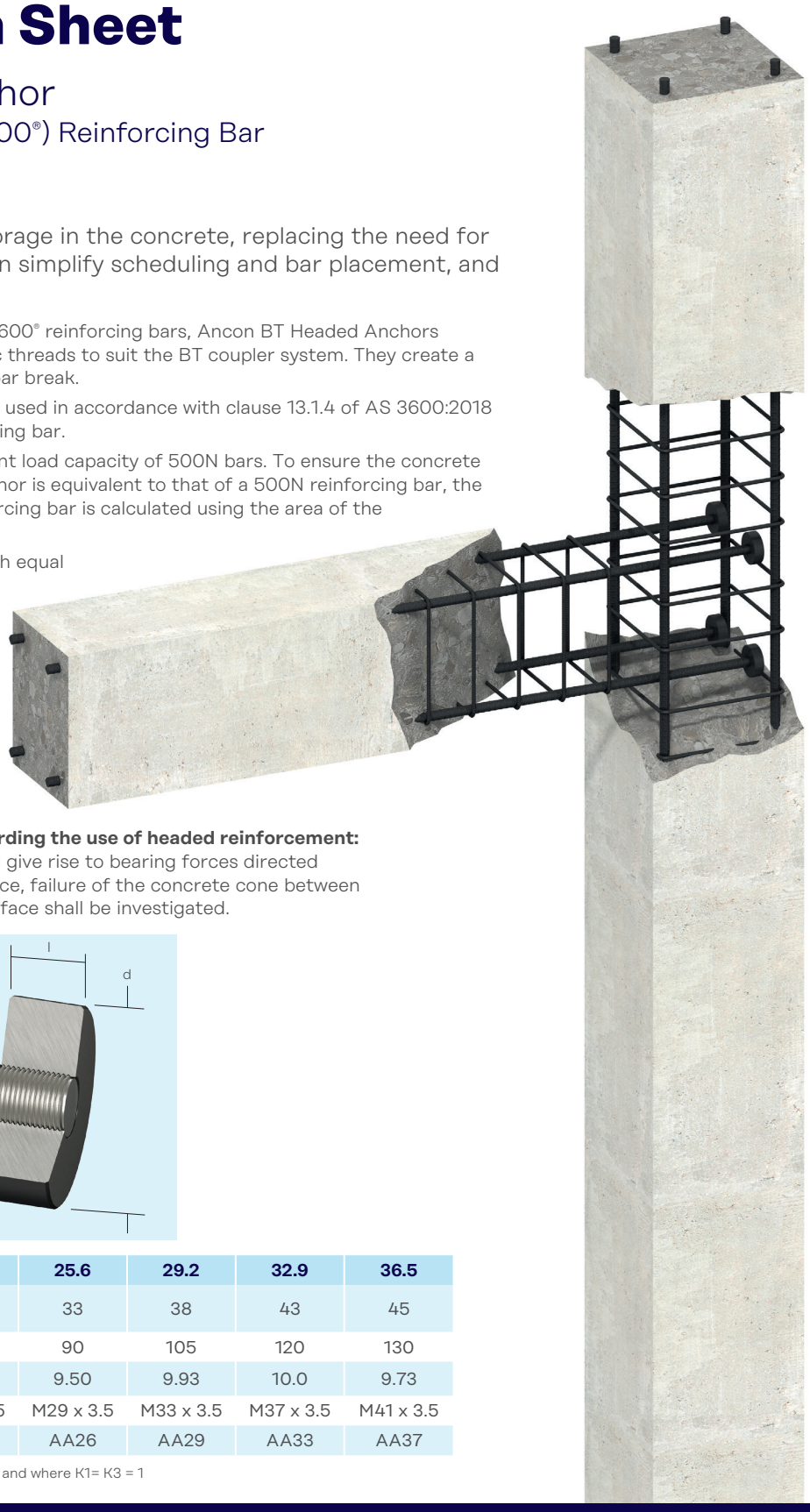
Leviat®

Ancon®

# Technical Data Sheet

## Ancon BT Headed Anchor

### For Grade 600 MPa (SENSE 600®) Reinforcing Bar



BT Headed Anchors create an anchorage in the concrete, replacing the need for cogged or hooked bar ends. They can simplify scheduling and bar placement, and reduce congestion in the concrete.

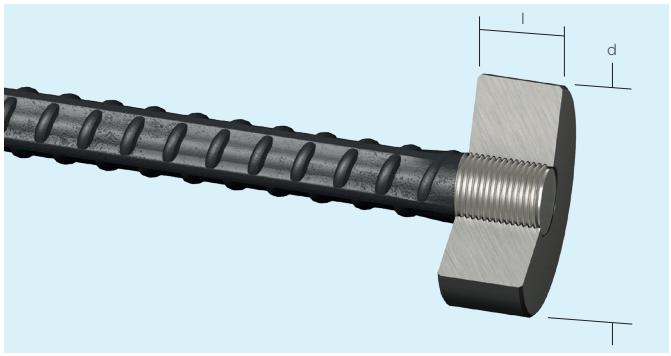
Designed for use on 18.3 to 36.5 mm SENSE 600® reinforcing bars, Ancon BT Headed Anchors (600 MPa) are internally threaded with metric threads to suit the BT coupler system. They create a full strength joint, the mode of failure being bar break.

Ancon BT Headed Anchors (600 MPa) can be used in accordance with clause 13.1.4 of AS 3600:2018 to reduce the development length of reinforcing bar.

Sense 600 reinforcing bars have the equivalent load capacity of 500N bars. To ensure the concrete bearing stress applied by the BT Headed Anchor is equivalent to that of a 500N reinforcing bar, the ratio of the net bearing area to area of reinforcing bar is calculated using the area of the equivalent 500N bar.

For most applications, the development length equal to 8 times the diameter of the SENSE 600 bar can be used*. Refined calculations can be performed using the values in the table below for the ratio of the bearing area and area of the equivalent 500N bar ($A_{head}$ / $A_{bar,\ 500N}$).

**Note from AS 3600:2018 Clause 13.1.4 regarding the use of headed reinforcement:**
Where the tensile force in a headed bar could give rise to bearing forces directed towards, or adjacent to, a free concrete surface, failure of the concrete cone between the head of the bar and the free concrete surface shall be investigated.




| Bar Diameter (mm) | | 18.3 | 21.9 | 25.6 | 29.2 | 32.9 | 36.5 |
|---|---|---|---|---|---|---|---|
| BT Headed Anchor Length (mm) | l | 25 | 27 | 33 | 38 | 43 | 45 |
| External Dia. (mm) | d | 65 | 80 | 90 | 105 | 120 | 130 |
| $A_{head}/A_{bar,\ 500N}$ | | 9.73 | 10.0 | 9.50 | 9.93 | 10.0 | 9.73 |
| Thread Size | | M21 x 2.5 | M26 x 3.5 | M29 x 3.5 | M33 x 3.5 | M37 x 3.5 | M41 x 3.5 |
| Part No. | | AA18 | AA22 | AA26 | AA29 | AA33 | AA37 |

*Reduction in development length based on 32MPa concrete and where K1= K3 = 1