

	PAGE
<b>UNITED CAST BAR LTD GROUP</b>	
• Managing Director's Statement	4
• History	5
<b>UNIBAR PROCESS</b>	
• Continuous Cast Iron History	7
• Start Procedure	7
• Continuous Casting Process	8
• Process Solidification	9
<b>UNIBAR QUALITY PROCEDURES</b>	
• Quality Procedures	11
• Sampling	12
• Testing Methods - Tensile	13
• Testing Methods - Hardness	15
• Testing Methods - Graphite and Matrix Structure	15
• Testing Methods - Measurement of straightness	15
• Testing Methods - Heat Treatment	16
• Certificates	17
<b>UNIBAR ADVANTAGES</b>	
• Economy (cost saving)	19
• Productivity/Quality	20
<b>UNIBAR INDUSTRIES &amp; APPLICATIONS</b>	
• General	22
• Industries & Applications	23
• Application Guide	24
<b>UNIBAR MATERIALS</b>	
• Profile & Size Range	28
• Properties	29
• Unibar Grades	30
<b>UNIBAR GREY/FLAKE IRON</b>	
• Mechanical Properties	32
• Unibar 200	33
• Unibar 250	34
• Unibar 250+	35
• Unibar 300	36
• Unibar 350	37
• Unibar GF	38
• Unibar GFP	39
• Unibar GFMV	40
• Unibar NR-F1	41
• USA Data Sheet - Unibar Class 40 ASTM A48	42
• Dimensional Tolerances	43
• Machining Allowances	43
• General Characteristics	44
• Behaviour	45

	PAGE
<b>UNIBAR SG/NODULAR IRON</b>	
• Mechanical Properties	47
• Unibar 400-15	48
• Unibar 400-18	49
• Unibar 400-18LT	50
• Unibar 400-18RT	51
• Unibar 500+	52
• Unibar 500-7	53
• Unibar 600-3	54
• Unibar 700-2	55
• Unibar NR-S2	56
• USA Data Sheet - Unibar 65-45-12 ASTM A536	57
• USA Data Sheet - Unibar 80-55-06 ASTM A536	58
• Dimensional Tolerances	59
• Machining Allowances	59
• General Characteristics	60
• Behaviour	61
<b>UNIBAR ADI (AUSTEMPERED DUCTILE IRON)</b>	
• Advantages of ADI over Steel	63
• Comparison ADI & Steel	64
• Benefits of ADI	65
• Unibar ADI Grades 1-4	66
<b>UNIBAR ANCILLARY PROCESSES</b>	
• Unibar Ancillary Processes	69
• Unibar Bored	71
• Unibar Turned	71
• Unibar Peeled	72
• Unibar Milled	72
• Heat Treatment	73
• Nondestructive Testing Procedures	76
<b>ADDITIONAL INFORMATION</b>	
• Surface Treatment of Unibar	78
• Hardness & Resistance	80
• Conversions	83
• Pressure Conversions	84
• World Associated Standards Grey/Flake	85
• World Associated Standards SG/Nodular	86
• Unibar Colour Codes – Europe	87
• Unibar Colour Codes – USA	88
• Glossary & Useful Formulas	89
• Notes	93
• Unibar Distributor Locations & Contacts	94