

THE BRITISH COAL UTILISATION RESEARCH ASSOCIATION

Information Circular No. 15Heat Transmission in Shell-Boiler Smoke Tubesby N. Y. KirovCONTENTS:

	Page
Foreword	1
General Summary... ..	1
Conversion Factors	4
PART 1. The Influence of Scale on Shell Boiler Performance...	5
PART 2. Fouling of Heating Surfaces in Contact with Flue Gases... ..	15
PART 3. Heat Transfer to Boiling Water... ..	22
PART 4. Heat Transfer by Convection in Boiler Smoke Tubes ...	33
PART 5. Some Practical Considerations of Boiler Smoke Tube Design	
Section A: Factors affecting Heat Transfer in a Single Smoke Tube	40
Section B: Applicability of Results obtained on a Single Tube to a Bank of Tubes	44
Section C: Further Considerations of Boiler Smoke Tube Design	47
Appendix: Derivation of Formula for Temperature Drop along a Smoke Tube	55
