## Services Tips metsonews Issue 44 | September 2011 METSO'S NEWSLETTER FOR CONSTRUCTION CUSTOMERS



## Jaw Crusher Measuring the crusher setting

In order to maximize your crushing plant's production performance (throughput), it is essential that all its equipment is tuned and adjusted properly.

The opening of the primary crusher, for example, will affect the throughput of secondary crushing, and secondary crushing will, in turn, influence tertiary production and so on.

## How to check the opening of the jaw crusher

Whenever a jaw crusher is off and at rest (stopped), it will remain in the open



CSS (A), OSS (B) and stopped (C)

position at its open-side setting (OSS). However, the adjustment of your crusher is performed at its closed-side setting (CSS).

• OSS is measured while the crusher is stopped.

• CSS is calculated by deducting a certain amount (the average stroke) from the OSS. That amount is provided by the table below:

Model	Stroke	
	mm	inch
C80	24	1
C96	32	1 1/4
C100	32	1 1/4
C106	34	1 3/8
C110	36	1 7/18
C116	37	1 1/2
C3054	32	1 1/4
C125	41	1 5/8
C140	41	1 5/8
C145	41	1 5/8
C160	41	1 5/8
C200	50	2

After measuring the crusher's OSS, the CSS should be calculated to define what the opening of the crusher is to be and enable adjustment to the desired setting.

The way we measure the opening varies according to the profile of the jaw: top-top, top-bottom or bottom-top. The tables for the cavity should be checked to figure out which way should be used.

Let's examine the calculation that should be performed to define the closed-side setting for the crusher provided below:

The measurements given in the table should be deducted from the open-side setting (OSS) for calculation of the closed-side setting (CSS) according to the size of the crusher to be adjusted.
Example: If the measurement of the OSS in the C160 model is 191mm (7 1/2"), then the CSS will be: 191 - 41 = 150 mm (7 1/2" - 1 5/8" = 5 7/8").

By determining the CSS, we will know the closed side setting of the crusher instead of opening of the crusher according to the needs of the plant.



For further information, please refer to the equipment instruction manual - chapter 3 (general information on the crusher), item 3.7 (crusher adjustment).

