




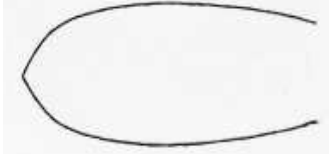
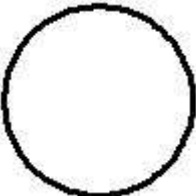
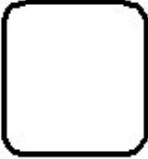
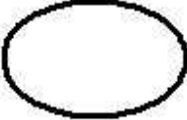

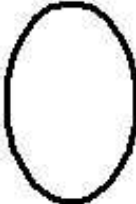

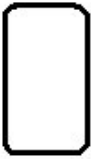




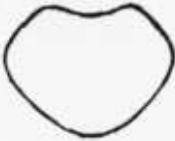





Belemnite determination key. Vs 08-11-2007

1. Rostrum type.

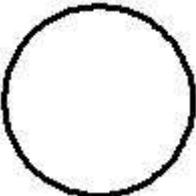
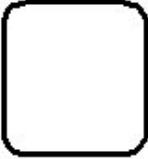
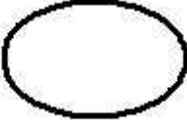

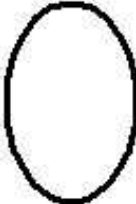



	Name:	Helptext	Picture
1	Conical	Funnel shaped rostrum. Maximum cross-section in the alveolar opening	
2	Subconical	Funnel shaped rostrum, narrowing in the alveolar region. Maximum cross-section near the alveolar opening.	
3	Cylindro-conical	Classical bullet shape.	
4	Hastate	Maximal cross section in the apical region.	
5	Subhastate	Bullet shape, narrowing down at the hollow, also called alveolar end.	
6	Foliate	Flattened rostrum, height exceeds width several times.	
7	Others	All other forms	No picture.


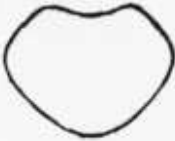





2. Shape at maximum cross section

	Name:	Helptext	Picture
1	Round	See figure	
2	Subrounded	See figure, width equals height.	
3	Depressed	Oval shape, horizontally flattened.	
4	Pumpkin	See figure.	
5	Compressed	Oval shape, vertically flattened.	
6	Rectangular	See figure.	
7	Subrectangular	See figure, height exceeds width.	
8	Quadrangular	See figure.	

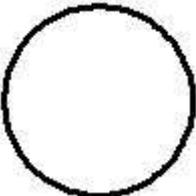
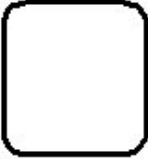
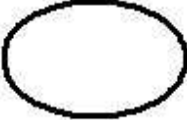

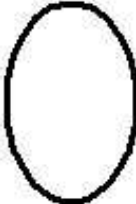



9	Subquadrangular	See figure.	
10	Pentagonal	See figure.	
11	Keyhole	See figure.	
12	Irregular	See figure.	
13	Eight-shaped	See figure.	
14	Clover	See figure.	
15	Heart-shaped	See figure.	


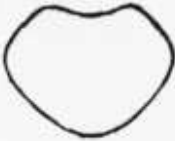





3. Shape apical cross section

	Name:	Helptext	Picture
1	Round	See figure	
2	Subrounded	See figure, width equals height.	
3	Depressed	Oval shape, horizontally flattened.	
4	Pumpkin	See figure.	
5	Compressed	Oval shape, vertically flattened.	
6	Rectangular	See figure.	
7	Subrectangular	See figure, height exceeds width.	
8	Quadrangular	See figure.	






9	Subquadrangular	See figure.	
10	Pentagonal	See figure.	
11	Keyhole	See figure.	
12	Irregular	See figure.	
13	Eight-shaped	See figure.	
14	Clover	See figure.	
15	Heart-shaped	See figure.	

4. Shape alveolar cross section.

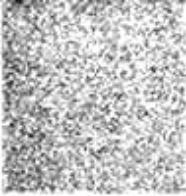
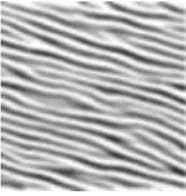
	Name:	Helptext	Picture
1	Round	See figure	
2	Subrounded	See figure, width equals height.	
3	Depressed	Oval shape, horizontally flattened.	
4	Pumpkin	See figure.	
5	Compressed	Oval shape, vertically flattened.	
6	Rectangular	See figure.	
7	Subrectangular	See figure, height exceeds width.	
8	Quadrangular	See figure.	

9	Subquadrangular	See figure.	
10	Pentagonal	See figure.	
11	Keyhole	See figure.	
12	Irregular	See figure.	
13	Eight-shaped	See figure.	
14	Clover	See figure.	
15	Heart-shaped	See figure.	

5. Apex type.

	Name:	Helptext	Picture
1	Pointed	See figure.	 A diagram showing a pointed apex, which is a simple inverted V-shape with sharp, straight sides meeting at a single point at the bottom.
2	Rounded	See figure.	 A diagram showing a rounded apex, which is a U-shaped curve with smooth, rounded ends and a smooth, rounded bottom.
3	Subrounded	See figure.	 A diagram showing a subrounded apex, which is a U-shaped curve with slightly rounded ends and a small, sharp point at the bottom.
4	Mucronate	See figure.	 A diagram showing a mucronate apex, which is a U-shaped curve with slightly rounded ends and a small, sharp point at the bottom, similar to subrounded but with a more pronounced point.
5	Elongated	See figure.	 A diagram showing an elongated apex, which is a narrow, elongated V-shape with a sharp point at the bottom.

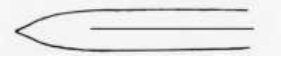

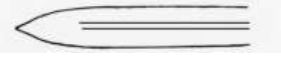
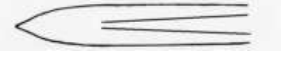



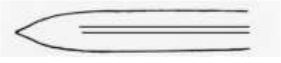
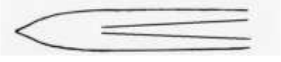
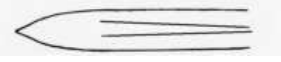
6. Rostrum surface

	Name:	Helptext	Picture
1	Smooth	Surface shows no details.	No picture.
2	Granulated	A sandpaper like surface.	
3	Vascular	Blood vessel like pattern.	
4	Other structures	All other surface structures.	No picture.

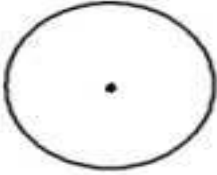
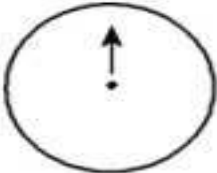
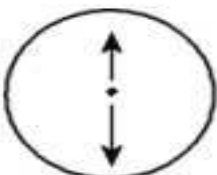
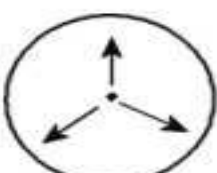
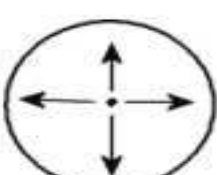
7. Postion alveolar groove.

	Name:	Helptext	Picture
1	No groove.	There is no groove visible at the alveolar, this is the hollow end, of a complete rostrum.	No picture
2	Ventral	The groove is at the belly side, opposite the siphon.	No picture
3	Dorsal	The groove is at the back side, on the same side with the siphon.	No picture
4	Ventral and dorsal	Grooves at the belly and back side.	No picture

8. Lateral lines or grooves

	Name:	Helptext	Picture
1	No line(s) or groove(s)	The complete rostrum is smooth and shows no details.	No picture
2	One line	See figure. A line does not carve into the surface of the rostrum. It is a surface structure.	
3	Splitting line	See figure. A line does not carve into the surface of the rostrum. It is a surface structure.	
4	Two parallel lines	See figure. A line does not carve into the surface of the rostrum. It is a surface structure.	
5	Two diverging lines	See figure. A line does not carve into the surface of the rostrum. It is a surface structure.	
6	Two converging lines	See figure. A line does not carve into the surface of the rostrum. It is a surface structure.	
7	More as two lines	All other combination of numbers and or patterns.	No picture.
8	One groove	See figure. A groove carves into the rostrum, it penetrates the surface.	
9	Splitting groove	See figure. A groove carves into the rostrum, it penetrates the surface.	
10	Two parallel grooves	See figure. A groove carves into the rostrum, it penetrates the surface.	
11	Two diverging grooves	See figure. A groove carves into the rostrum, it penetrates the surface.	
12	Two converging grooves	See figure. A groove carves into the rostrum, it penetrates the surface.	

9. Apical grooves

	Name:	Helptext	Picture
1	No groove(s)	The pointed end, this is the apical part of the rostrum, shows no details.	
2	One	The pointed end, this is the apical part of the rostrum, shows one groove.	
3	Two	The pointed end, this is the apical part of the rostrum, shows two grooves.	
4	Three	The pointed end, this is the apical part of the rostrum, shows three grooves.	
5	Four	The pointed end, this is the apical part of the rostrum, shows four grooves.	
6	More	More as four grooves	No picture

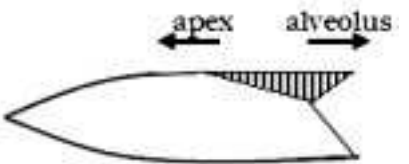
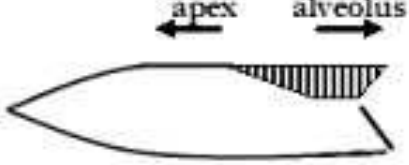
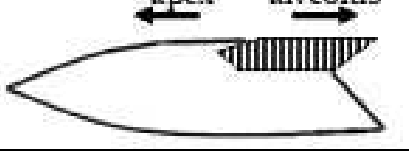

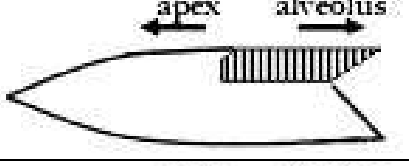
10 . Rostrum size.

	Name:	Helptext	Picture
1	S	Small (0-40 mm)	No picture.
2	M	Medium (40-100 mm)	No picture.
3	L	Large (100-200 mm)	No picture.
4	XL	Extra Large (200-400 mm)	No picture.
5	XXL	Extra extra large (>400 mm)	No picture.

11. Relative length alveolar groove.

	Name:	Helptext	Picture
1	No groove	There is no groove visible at the alveolar end of a complete rostrum.	No picture
2	Short	The length of the groove visible at the alveolar end is less than 10 percent of the length of the complete rostrum.	No picture
3	Medium	The length of the groove visible at the alveolar end is between 10 and 35 percent of the length of the complete rostrum.	No picture
4	Long	The length of the groove visible at the alveolar end is between 35 and 50 percent of the length of the complete rostrum.	No picture
5	Very long	The length of the groove visible at the alveolar end is more as 50 percent of the length of the complete rostrum.	No picture

12. Slit type.

	Name:	Helptext	Picture
1	1?		
2	2		
3	3		
4	4		
5	5		
6	6		